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"Let there be progress, therefore; a widespread and eager progress in every century and epoch, both of individuals and of the general body, of every Christian and of the whole Church; a progress in intelligence, knowledge and wisdom, but always within their natural limits and without sacrifice of the identity of Catholic teaching, feeling and opinion."—ST. VINCENT OF LERINS, *Commonit*, c. 6.

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THE TWOFOLD AUTHORSHIP OF SACRED
SCRIPTURE.

In a very wide circle of readers inside, and more especially outside, the Catholic Church, one very interesting topic of conversation to-day is the proper position to be assigned to the Bible. Many are asking themselves and asking others, What is the Bible? What is its value? Is it human? If so, how far? Is it divine? If so, how far? What is Inspiration?

All who call themselves Christians agree that the Bible is inspired; but most of them have the haziest notions about the subject, and, when asked for a definition of its nature, they are not prepared to give any, beyond saying that it is some mysterious influence of God's grace on the souls of the sacred writers. It is a remarkable fact that in all ages, both Jew and Christian, both orthodox and heterodox have agreed as to the existence and main idea of Inspiration. The Catholic Church, for instance, has defined, with a good deal of precision, the Fact and Extent of Inspiration in a decree in which she declares that "All the Books of Scripture with all their parts are inspired." As to any definition of the Nature of Inspiration, the Church has done little more than to declare that "God is the Author of the Sacred Books." However, the absence of a more precise definition need not blind us to the general or essential idea of the thing.

Though we can not accurately define Inspiration in detail, or explain its precise nature, or measure the exact amount of Divine assistance rendered in each case, still we can, by a process of elimination, arrive at a tolerably clear notion of what it is, or, rather, what it is not. To this end it will help us, if we can draw definite lines within which all discussion must be conducted, and beyond which we can safely say that the true notion of Inspiration does not exist. Now it so happens that there are two theories, the "Mechanical" and the "Natural" which are so extreme and unreasonable that they seem to indicate the limits of thought on the subject for all who believe, in any true sense of the word, in the Inspiration of Holy Writ. Hence, if, by any process of elimination, we can dispose of these extreme views as too unreasonable to be entertained, we shall have narrowed down the limits within which the true notion of Inspiration must be found, and thus come so much nearer to a solution of the problem.

THE "MECHANICAL" THEORY OF INSPIRATION.

The polemics immediately following the Reformation led many Protestants and a few Catholics to give an undue emphasis to the divine, and an almost total denial to the human, element in Sacred Scripture. A theory of Inspiration, justly called the "Mechanical," was advanced by Quenstedt, Calovius, and others among our separated brethren, and adopted even by some Catholics. This theory leaves little or no room for the conscious and voluntary activity of the writers whom the Holy Ghost employed, but regards them almost as mere machines.

It would seem that it was the Protestant Reformation that led to the preponderance of this strict view of Inspiration. At the same time it must be admitted that some Catholics, who did not wish to have it appear that Protestants held Holy Scripture in greater esteem than they, allowed themselves to be influenced to some extent by somewhat similar, though usually more moderate, views on the subject. It was the fundamental principle of the Reformers to give exclusively to the Bible all the authority which had hitherto been shared by it and the tradition of the Church. Hence, thought they, the

one foundation on which the whole fabric of Christianity should rest must needs be wholly divine and without the least admixture in it of the human. This rigid theory soon brought into vogue some very palpable exaggerations, and it became customary to speak of the sacred writers as "hands of God," "scribes and notaries of the Holy Ghost," "secretaries," "pens," "reeds," "harps," "flutes of God."

To insure a fair presentation of this theory, it may be well to quote the opinions of some of its best known advocates. The theological faculty of Wittenberg declared, in 1638, that, to speak of barbarisms, solecisms, and grammatical errors in Scripture is blasphemy against the Holy Ghost. Calovius says: "It is impious and profane audacity to change a single vowel-point in the word of God, or to substitute a smooth breathing for a rough, or a rough breathing for a smooth." (Calov. *Systema*, I. c. 4; II. c. 1.). "Hellenistic Greek, with a mixture of Hebraisms, indicates a desire on the part of the Holy Ghost to make the New Testament like the Old." "Hellenistic Greek is simply Holy Greek; it is the peculiar language of the Holy Ghost." (Pfeiffer, *Herm. Sacra*, c. 8). "The Scriptures are given and guaranteed by God, even in their very language. The writers neither wrote nor spoke one word of their own, but uttered syllable by syllable as the Spirit put it into their mouth to utter." (Gaussen, *Theopneusty*, p. 61). "Every syllable of Scripture is just what it would be if God had spoken from Heaven without the intervention of any human agent." "The Bible is none other than the voice of Him who sitteth on the Throne. Every book of it, every chapter of it, every verse of it, every word of it, every syllable of it, is the direct utterance of the Most High—supreme, absolute, faultless, and unerring." (Dean Burgon.) The climax was reached in the discussion in which it was seriously debated whether Scripture should be considered a "creature" or not, and the opinion defended by Nitsche was that it cannot be called a "creature," but "a divine effulgence, a part of God himself." (Hollaz.)

To such extremes did many go at that time that the "Formula Consensus Helvetica," in 1675, expressly declared it to be the teaching of the Swiss Church that, not only the consonants,

but also the vowel-points, the accents, and the entire punctuation in the present text of our Hebrew Bible were all inspired when the several books were composed. Yet it is an established fact that this complicated system of punctuation was invented and slowly elaborated in the Rabbinical Schools of Babylon and Tiberias sometime between the sixth and the tenth century of the Christian era, and 1,000 or 1,500 years after the composition of the latest book in which this system of punctuation is now found.

Similar views have at times prevailed among the Jews. The earliest writer on this subject is Philo, the Jewish scholar, Alexandrian philosopher, and brilliant exponent of Judæo-Hellenic thought at the time of Christ. He tells us that the sacred writers were "passive," and "in an ecstasy," while writing. "The prophet gives forth nothing of his own, but acts at the prompting of another in all his utterances. As long as he is under inspiration, he is in ignorance, his reason departing from its place; for, yielding up the citadel of his soul, the divine Spirit enters into it and dwells in it." (*De Special. Leg.* 4, 8.)

About fifty years after Philo, Josephus, the great Jewish historian, says that Balaam prophesied, "Not as master of himself, but moved by the Holy Spirit to say what he said." (*Antiqu.* 4, 6, 5.) He represents Balaam as saying to King Balak, "Thinkest thou that it is in our power to speak or to be silent . . . , when the spirit of God takes possession of us? For he causes us to utter such words and such speeches as he wishes, and without our knowledge; for when he has entered into us, nothing that is in us is any longer our own." (*Contra Appion*, c. 8.)

The Jewish Rabbins, according to all accounts of them, were, at a very early date, believers in the strictest theory of inspiration. Many of them held that God Himself handed down from heaven the Mosaic writings, already written. They had a tradition that, when Moses arrived at the summit of Mount Sinai to receive the Ten Commandments, "He found God writing with His own hand the ornamental letters at the head of the chapters in the book of the law." In their superstitious reverence for the law of Moses, the Rabbins taught that

God Himself was so fascinated by the ineffable perfection of the Pentateuch that he spent three hours a day studying it. They counted every verse, every word, and every letter of the Hebrew Bible; they recorded how many times each letter of the Hebrew alphabet occurs in their Old Testament; they tell us how often the same word occurs either at the beginning, or at the end, or in the middle, of each verse; they give the middle chapter, the middle verse, the middle word, the middle letter, of each book and of the entire Hebrew Bible. Thus they tell us that there are in the Hebrew Bible 23,206 verses; that the letter "aleph" occurs 42,377 times and "beth" 35,218 times; that the "breastplate" verse (Lev. VIII, 8.) is the middle verse, that "sought" (Lev. X, 16) is the middle word, and that the letter "vav" in the word "gahon" (*Ibid*, XI, 42) is the middle letter, of the Pentateuch.

It was also the common opinion of some Jewish doctors that this complicated system of Massoretic punctuation was originally revealed by God to Adam; that it was orally transmitted by Adam to Moses; that Moses in like manner handed it down to Esdras; that Esdras passed it on to those who finally inserted it into the Hebrew text.

As to the Fathers of the Church, the great majority never admitted, but stoutly repudiated, this exaggerated theory of Inspiration. A few of them, it is true, sometimes use expressions which have been understood to imply that they considered Holy Scripture mechanically inspired. However, it seems more probable that they used such language merely for the purpose of illustrating in a rhetorical way that Scripture was composed under a powerful divine influence. There have been some Catholics also who held the mechanical theory of Inspiration in one form or another, but the theory has never had the approval of the Church.

As is evident, this is but an imperfect resumé of the facts in the case. It is a curious piece of history, but none the less true; the Bible has been placed on the throne of God and worshipped. There never was an idol or pagan god that received more superstitious homage than this Book. There never was a charm that was supposed to possess greater power to protect its votaries from all manner of harm than

this Book. There never was an oracle so confidently and so blindly consulted, on even the most trivial affairs of life, as the pages of this same Book. At the same time it must be admitted that none of these things deserved this reverence so much as does the Bible. Its power has had no parallel in its range of time and space. Its worshippers have been counted by the million. They are found among the most cultured and enlightened races of mankind, and among the most intelligent adherents of the most pure and spiritual religion in the world. There is, even yet, as profound a reverence for the truths of Scripture and as lofty a concept of its Divine Author as ever there was in the past; only it takes a more sober form and is considered more wise and discriminating. But there still remains some of the blind fanaticism of the past lingering in the minds of many a reader of the Bible, a fanaticism which converts the good Book into a fetish as vain, as awful, as absolute, and as preposterous as ever was made by human hands on the banks of the Congo or the Ganges.

THE "NATURAL" THEORY OF INSPIRATION.

The extravagant over-statements made by extreme dogmatists shortly after the Reformation soon caused, as is usual in such cases, a rebound to the opposite extreme, and became responsible for much of the disquiet and doubt which now prevail in religious circles outside the Catholic Church. One result of this recoil is that quite recently a view, the very opposite of the foregoing, has become current under the name of the "Natural" Theory of Inspiration. Its advocates hold that Inspiration is nothing more than the higher development of that natural insight into truth which all men possess in some degree; that it is an order of intelligence which, in morals and in religion, naturally results in the production of sacred books of the same sort as the Bible, just as, in secular and worldly matters, a corresponding order of intelligence gives rise to great works in art, science, and philosophy.

This theory is closely related to Rationalistic notions about man's independence of God, as well as to the Pantheistic position that man is himself the highest manifestation of an all-pervading but unconscious intelligence which naturally,

though only occasionally, displays itself in writing just such books as the Bible. The advocates of this theory are accustomed to describe Scripture in the most complimentary phrases and in the most glowing colors. They frankly admit that it is inspired throughout ; but they degrade Inspiration so far as to identify it with strong emotion, with fervid imagination, with mere poetic imagery, with natural genius, all which, in some very vague and general sense, is occasionally called Inspiration, and even divine Inspiration. It was customary in ancient times to imagine that signal talents were the special gift of God, and that the painter, the poet, the sculptor, the brilliant orator, the dashing general, and the conquering hero were all impelled by an impulse of the Deity called Inspiration or genius, a genius which came not by the slow course of nature, but was conferred by the swift interposition of the Deity. Such is the inspiration ascribed to the divine Plato, to Homer, to Socrates, to Dante, to Milton, to Shakespeare. Thus mere natural genius is mistaken for the strictly supernatural impulse and divine guidance of the spirit of God.

1° In opposition to the "mechanical" theory the correct view, which is sometimes called the "*dynamic*," holds that the Bible is human, that it is truly the word and the work of man, and that it bears on its very face all the evidences of its human origin as clearly and as unmistakably as any other book ever composed by man. Moreover, this human authorship extends to all the parts of Holy Writ.

2° In opposition to the "natural" theory the correct view holds that the Bible is divine, that it is the word and the work of God, and that it is the result of a strictly supernatural operation of a personal God acting directly on the souls of the sacred writers. Moreover, this divine authorship extends to all the parts of Holy Writ.

I.—THE BIBLE IS ALL HUMAN.

The mechanical theory is to be rejected, because it ignores any real human authorship whatever in the Sacred Scriptures ; because it assumes an exercise of divine power for which there is no guarantee, and for which no sufficient motive can be

assigned; because it does not remove the presumption that every book written in human language is supposed to be the work of man, until the contrary is proved; and because it does not satisfactorily explain the clear evidences of individuality in the Sacred Writers.

At times in the past the human element in Sacred Scripture has been reduced to a minimum, or even quite eliminated. This, no doubt, was a mistake. The tendency of later times is to make it appear that this human element is larger than it was formerly supposed to be. To some it has even appeared that the human has been allowed to encroach too much upon the divine. However that may be, it is probably true that the human in Scripture is more extensive than many good people in the past, and not a few good people in the present, have imagined it to be. Yet, when rightly understood, this very humanity of the Bible is a proof of its divinity. The reason for thus calling attention to the human in Scripture is that this is the side of the Bible which, up to the present, has been much ignored by a certain class of religious people. At the same time, while recognizing fully the human medium through which the divine message has been transmitted to us, we should remember that it is only a medium, only a means to an end, and that the end is the divine element which lies beneath, and behind, and above the human, and which gives to Scripture all its exceptional value.

But why, it may be asked, did God use human instruments in the composition of the Sacred Books? He might have written them Himself, as he wrote the sentence of Belshazzar on the walls of his palace at Babylon, or as he wrote the Ten Commandments on the tablets of stone for Moses on Mount Sinai. He could have written the Bible "with an iron pen and lead on the rocks forever," or carved it in huge indelible hieroglyphics upon some inaccessible crag of the Rocky Mountains; or He could have blazoned it forth in letters of burnished gold on the blue vault of heaven, where all the world might read. He could, no doubt. But he preferred to write it with the co-operation of a human intellect, and with the consent of a human will, and with the resources of a human memory. He preferred to instruct and save men by the instrumentality of men.

He preferred to use human instruments, so as to make the Bible a human book, and to give to it all the peculiarities which characterize the works of man. He preferred to use human minds as the channels of his communications, because thus the message would be more readily received and more thoroughly assimilated, and more lastingly retained by the minds of those to whom it is addressed.

As a matter of fact, and, no doubt, as a result of its human origin, the Bible with its endless variety of human characters and temperaments, with its ceaseless display of human emotion, human sentiment, and human passion, and with its ever-varying aspects of God's many-sided truths illustrating and supplementing each other, is by all means the most intensely human, and the most intensely interesting book in the wide world. St. Cyril of Jerusalem uses a beautiful simile to explain the varying action of the Holy Ghost on the souls of differently constituted men. "One and the same rain falls from heaven upon the whole world, yet it becomes white in the lily and red in the rose, and purple in the pansy and violet. In itself, however, it is invariable and changes not, but, by adapting itself to the nature of each thing, it becomes what is appropriate to each."

No doubt God could have dispensed with human instrumentality in the composition of the sacred books, but it does not pertain to us to consider now what God could, should, or would have done in any possible case, but only what he has actually done in the concrete case before us. Now, this can be easily ascertained; for the same Scripture, which claims to be the word of God, claims, also, to be the word of man. The Scriptural evidence to the human authorship of the Bible is as direct and explicit as is its evidence to the divine authorship, and it is embodied in similar forms of language. We find this evidence in the testimony of the sacred writers themselves, who speak of their share in the work in almost the same terms as if there had been no other agency employed. In many instances merely the nominative case of the verb is changed and instead of reading, "Thus saith the Lord," we find, "Thus saith Isaias the Prophet;" or, "Then was fulfilled what was spoken by the Prophet Jeremias," or, "I Paul say unto you."

In a word, the biblical proofs of the human authorship of the Bible are of exactly the same sort as might be found in any uninspired book, the author of which might have occasion to mention the fact that he had written the book; nor could the proofs have been more explicit than they are, if there had been only a human agency concerned in its composition. Moreover, we should not forget that, until the contrary is proved, the presumption is that every book written in human language is, of course, the work of man.

In addition to the above mentioned and many similar statements made by the authors themselves, we discover human features impressed upon the whole framework and upon every individual page of Holy Writ. These features are quite analogous to the divine, and prove that the individuality of the writers is preserved and that inspiration did not remove, but rather pressed into its service, all the personal peculiarities of the writers. Every man has a combination of peculiarities and idiosyncracies which clearly distinguish him from every other man. This combination forms his individuality. It arises from many sources, from birth, heredity, nationality, climate, early education, habits, experience, occupation, religious convictions, personal and local environment, one's own will, and from the degree of civilization and form of government under which he has lived.

But, from whatever source it arises, it is human nature, it is a permanent institution, and has come to stay. Consequently, it in some way affects the writer's whole being, it influences his every action, it moulds his thoughts, it prompts his feelings, it suggests his expressions. Now it is precisely this individuality of each writer that furnishes the materials upon which and is the channel through which, the spirit of God must work in the inspiration of the Holy Books. We know that grace does not destroy nature; it does not substitute new faculties for the old ones; it simply changes the direction of the currents, which continue to flow on in the old channels. So is it in inspiration, which is itself a grace. One of the inspired writers is naturally warm, ardent, and impulsive; another is naturally solemn, majestic, deliberate, and phlegmatic. One is cultivated, another is rude; one pours forth his eloquence

like a mountain torrent, another breathes forth notes as soft and soothing as "the still small voice," which the Prophet heard at the entrance to his cave in the mountain. The same should be said of all other peculiarities which originate in age, race, climate, habits, education and constitution. They are as compatible with inspiration as they are with the grace of God; and we know that the grace of God admits the play of human passion, human emotion, and human sentiment, that it coöperates with the will and the memory, and is consistent with the greatest brain work in searching for information from every source of human knowledge. In fact, the continued exercise, in undiminished vigor, of all the intellectual and volitional faculties of the writers is one of the most marked peculiarities of Sacred Scripture, and is manifest on every page. Indeed, it is the most obvious fact that presents itself to the careful student, and even to the casual reader. It is, besides, a fact which must never be forgotten, if we wish to understand correctly the sacred volume.

There was a time when some, whose faith outstripped their knowledge, maintained that the Bible was exclusively Divine. This is now generally recognized as a mistake, for no one can candidly study the phenomena presented on every page of the Book without finding in it much that is human. The Bible is all human, because it was written in human language; it was composed by members of the human family and addressed to the human understanding, to the human heart, to the human soul. The thoughts came from God, but they were moulded into shape and took form in the mind and under the hand of living, throbbing, active men; they stirred the blood, they quickened the pulse, and they moved the heart of men like ourselves. It was a human hand that held and guided the pen; the words, when written down, were human words, belonging to some family of human languages, and they were written according to the general laws of human speech, though the particular forms of expression were not always as perfect as if written by the classical writers of the language. This is most reasonable: for, if we reflect upon it, it will be clear that, if God is to teach man by inspiration, He must teach him, not in the language of angels

or of monkeys, but in the language of men,—the only language that man can understand. Hence, if we ignore the presence of this human element, the Bible will be a riddle to us ; whereas, if we recognize it frankly, the Bible will appear much more simple, more beautiful, more divine, and more consonant with God's ways of dealing with man. Nor can we deny that it adds a singular charm to the book, to find the human thus blended harmoniously with the Divine.

We might also add that, from an evidential, as well as from a hermeneutical point of view, it is a matter of great importance that the individuality of the writers be maintained, in order that Scripture may have the corroborative evidence of many concurrent and independent witnesses. Also from the standpoint of the higher critic, the same holds good. For since each book reflects the character, the genius, the trend of thought, the tone, the color, the sentiment, the modulations of mood and passion, and even the very atmosphere in which the writers lived and moved, and since so much of what they wrote received its tinge and shape from the age, the place, the people, and the civilization under which they wrote, it is difficult to conceive how any man, living at a much more recent date, can so completely strip himself of his own identity, can clothe himself in the individuality of another, and, projecting himself into a distant past age, write as if he belonged to that age. To a great extent this holds in sacred as well as in profane literature ; for God adapts himself much to the peculiarities of his intelligent instruments. This principle is now so generally admitted, that the human characteristics of a sacred book are often taken, in the absence of sufficient external evidence to the contrary, as proof that the book was written at such a time, in such a place, by such a man, among such a people, in such an environment, under such a grade of civilization, and under such a form of government. These form what are generally called the "Internal Criteria" for proving the human authorship, date of composition, etc., of biblical works.

Indeed one need not have read much of the Bible to be satisfied that not all its writers wrote alike. Each writer had his own way of expressing his thoughts ; Peter is involved and familiar ; Paul is nervous, learned, didactic, and as subtle as could

be expected of a man who had been educated at the feet of Gamaliel, and trained in all the methods of the Rabbinical schools. When we read John, we perceive at a glance that it is not the style of Paul. For John is rustic and simple in style, and sublime in thought, a profound thinker, and a great saint lost in contemplation of the "Word made flesh," Who dwelt from the beginning in eternity and on Whose bosom John once leaned. Whereas, Paul is remarkable for his fiery zeal, his broken style, his sudden transitions, his love for argument, his nervous, energetic reasoning, his lofty thought, and his tortuous logic.

As to the Old Testament writers, who does not perceive at a glance the broad distinction between the fervid and majestic poetry of Isaias, the lyrical poetry of the psalms of David, and the sententious wisdom of Solomon? Who does not instinctively feel that Jeremias was of a melancholic, atrabilious, lugubrious temperament, and fitted by his very nature to be an instrument in the hands of the Holy Spirit for writing Lamentations? Also from a casual perusal of his poetry, who does not see that Amos had been brought up in a country home among shepherds? In all that he writes, he still lingers among the flocks, he wanders with them in the pastures, he remembers the cultivation of the fields, the harvests, and the sowing season; and his illustrations and comparisons are drawn from the blight that falls on the vineyards, and from the lion that invades the sheep in the fold. The rustic simplicity and natural beauty of his language, unlike the refined diction of Isaias, the courtier prophet, is perfectly natural to one who had spent his youth as a "herdsman and a dresser of sycamore trees." Nor can any one doubt that he had more than once witnessed the scene which he describes, a shepherd rushing to the rescue and snatching out of the very jaws of the wolf or the jackal "two legs or a piece of an ear" of some innocent sheep or unfortunate goat.

We read that "holy men of God spoke as they were moved by the Holy Ghost." Apropos of these words we remark that, though they were "holy" men and were enlightened, and purified, and ennobled by the Holy Spirit, yet they were "men." They had human hearts, human feelings, human prejudices,

human passions, human weaknesses, and all the other limitations of human nature. Inspiration did not destroy their individuality nor abolish the differences of character and education. Now, we may lay it down as a principle that, whenever God uses his creatures He uses them according to their respective natures. He uses inanimate beings as such, and governs them by physical laws. He uses brutes as brutes, and governs them by instinct. He uses angels as angels, and governs them, we know not how, but in a manner suited to angelic intelligences. He uses man as man, and governs him through reason and free will. Since, then, God uses no man as he would use a dumb beast, we must conclude that man's faculties of reason and free will are not suspended under the influence of Inspiration. "For the gifts of God are without repentance." The Sacred Writers were not, as the Montanists contended, merely passive; they were not in a trance; they were not in an ecstasy; they were not, like the Cumæan Sibyl, bereft of their senses; they were men, and in full possession of all their mental faculties. In inspiring them, God did not deprive them even momentarily of any of those gifts which distinguish man from the beasts of the field. On the contrary, it is more in harmony with what we know of God's ways of dealing with man, to suppose that in inspiring men he lifted them up into His own supernatural atmosphere, and perfected their nature by heightening their faculties and guaranteeing them their continued exercise.

Hence we infer that, when inspired, the learned scholar continued to write as a scholar; the poet remained a poet; the philosopher remained a philosopher; the historian remained a historian; and the shepherd and the fisherman betrayed, in what they wrote, their provincial training, or rather their lack of training. Each retained his own methods, his own habits, his own customs, his own talents, his own way of looking at things, his national, local, and personal prejudice, his own previous grade of education, the experience of his own life, his own logical methods, his own literary acquirements, his own dialect, his own pronunciation, his own peculiar accent and tone of voice, his own handwriting, his own gait and manners, and his own peculiar endowments, whether natural or acquired. While Inspiration may have improved some of

these peculiarities, it destroyed none of them, and probably affected others as little as it promoted digestion or accelerated the circulation of the blood.

This enables us to understand much that would else be enigmatical. For instance, we are assured that the choice of language depends not exclusively on the Holy Ghost inspiring, but also on the writer inspired. If a Hebrew is inspired, he writes in Hebrew; if a Chaldean, he writes in Chaldee; if a Greek, he writes in Greek; if he speaks two languages, he writes in either or in both. Similarly, the selection of the individual words in that language depends also on the writer; and it is left to him to put those words together into sentences, and the sentences into paragraphs, and to combine the paragraphs into chapters and books, all according to his own will, which grace has made conformable to the will of God. From what has been said it follows that the whole arrangement and distribution of materials and the sequence of thought are human as well as divine, and that to write even an inspired work industry and application are needed. For the author of the Second Book of Maccabees, who informs us that the effort cost him labor and sweat, would never have labored as he says he did, would never have been so solicitous whether his task was well done or not, and would not have spent so much time in vigils and consumption of midnight oil, if, not only the thoughts, but the very words had been put upon the tip of his pen. Still less would he have asked to be excused for the style, if God had done all, and he had done nothing.

So, also, many parts of the Bible are taken up with the expression of thoughts, and sentiments, and feelings distinctively human, sentiments entertained, not by God the primary author of Scripture, but only by the human writer. Of course there can be no doubt that the writer was inspired thus to give vent to his feelings. Thus Paul's words, "I am a fool," may have been quite fitting and appropriate to express Paul's humble opinion about himself, but were hardly suited to express the judgment of the Holy Ghost, either on Himself or on any other Person of the Blessed Trinity. The same should be said of the feelings of loneliness, doubt, fear, anguish, despair, hope, sorrow, and contrition for personal sin. They were

not divine in origin or character. They were the appeal of the creature to the Creator for help, light, strength, pardon and comfort. They were just such feelings as men often experience in the great crises of life, in joy, in sorrow, in faith, in doubt, in hope, in despair, in the hour of temptation, and in the fierce struggle against sin. Thus in the psalms God moved the individual heart of David to utter the sentiments of the universal heart of mankind and to express the yearnings of all men for the unseen God.

Because of his partial dependence on his own efforts the inspired historian was obliged to prosecute his studies and to compose his work much after the same fashion as historians do now, only much better. He had to draw his materials from experience, from the testimony of witnesses, from oral tradition, and from musty old documents stored away in family or public archives; and all the while he was obliged to exercise great care to make none but a proper use of his sources of information. One result of this is that what he wrote was tinged by the sources whence it was derived, and colored, though not, of course, discolored, by the ideas prevalent at the time; for the scientific knowledge of the writer was to some extent circumscribed by the same horizon as that of his contemporaries. All this, it will be found, enhances, instead of diminishing, the value of the Bible as a book of religion.

Thus does God usually act both in the world of nature and in the world of grace. Hence it is no more a slight upon Holy Scripture to say that it is human as well as divine, than it is a slight on the earth to say that it is not perfectly spherical, because slightly flattened at the poles, or to say that it does not revolve around the sun in a perfectly circular orbit, or to say that Jesus Christ is human as well as divine.

It is, therefore, manifest that the human features impressed on Holy Writ are precisely such as we should expect to find there, if the writers had exercised their intelligence and all their other natural endowments; from which we conclude that they did exercise them. Therefore God used conscious, willing men as instruments in stamping those features on the Book. It is

then a perversion of the proper notion of inspiration to represent it as reducing the writers to mere machines. They were not pens, they were not penmen, they were not secretaries, they were not mere amanuenses; they were authors, instrumental authors, if you will, but yet authors. We may therefore infer that Inspiration did not suspend their reason, did not destroy their liberty of choice, did not impair their memory, did not kill out their imagination, did not deaden sentiment, did not curb all the emotions. Inspired men did not receive the Bible already printed, and bound, and clasped, and illuminated, from heaven. Nor did they, as painters have sometimes described, copy from a golden book hanging from heaven by silver cords and held open by angels floating in the sky. They wrote it with conscious exertion of head and heart and hand. They reasoned on what they wrote and exercised every natural faculty in order to do well what they had to do, God at the same time assisting them by His grace, by the grace of Inspiration. Thus energized, strengthened, and intensified, their whole soul was awakened and they were better able to perform the task assigned them. The presence of God in the soul is the best guarantee of the continued exercise of man's faculties, for the divine presence is perfectly consistent with the possession of the most active intelligence, of the most calm and dispassionate judgment, and of the clearest perception of speculative and practical truths. We know that the bush in which God appeared to Moses on Mount Horeb remained a bush and was not consumed, while glowing with the brightness of God's glory, and uttering the divine oracles; and that when God made Moses a prophet He did not unmake Moses the man.

II.—THE BIBLE IS ALL DIVINE.

In spite of the wide scope thus given to human topics, to human thought, and to human action in the Bible, still the divine element which lies behind, which pervades and overshadows the human, and which gives the book all its exceptional value, is not less real, nor less actual, nor less efficient. The body, the external shape and form, "is of the earth,

earthy," but the spirit which quickens this body "is of heaven, heavenly." Now it is precisely its inspiration that makes Scripture heavenly and divine. But inspiration is by no means an exclusively Jewish or Christian word. Some of the classical writers of antiquity were accustomed to ascribe artistic talents, poetic genius, oratorical powers, and the gift of prediction, to a divine afflatus, to poetic frenzy, to inspiration. The word afterward passed over into theological language, and was there used in a higher and truer sense. The word occurs but once in the New Testament, II Timothy, III, 16; but this passage does not help us much to understand its precise meaning. It means an "inbreathing by God." But God is not corporeal. He has no breath. Hence the word is figurative and metaphorical. It denotes some mysterious divine influence, and means that the man or the book into which God has breathed, is inspired and hence divine. The Church, relying on other sources of information than the bare word, has authoritatively defined that "*God is the author of Scripture.*" Inspiration, then, is the act by which God becomes the "*author*" of the sacred books.

It will help still further to understand Inspiration if we consider some of its effects. It may have varied from case to case, sometimes merely helping a man to tell more correctly and more edifyingly than he otherwise would have done something which he had learned by experience or observation, and sometimes enabling him to write things which, if left to himself, he could never have known at all—prophecies, mysteries, secrets of the heart, and the deep things of God. It helped one man to be a historian, another to be a poet, another to be a moralist, another to be a psalmist, another to be a legislator, another to be the editor of musty old documents, and another to compose such canticles as the "Magnificat," the "Benedictus," and the "Nunc Dimitis." It enlightened the intellect, it elevated the thoughts, it moved the will, it excited the imagination, it stirred the emotions, it gave a clearer perception of the nature and majesty of God, a higher appreciation of truth, a quicker intelligence, a calmer judgment, a more glowing warmth and devotion to God, and generally a heightening, quickening, and enlarging of all the faculties

of the soul. It gave all these, or more than these, or less than these, as the circumstances of each case demanded; but the result of it was always a divine and infallible Book.

St. Peter speaks of the prophecy of Scripture which "Came not by the will of man at any time, but holy men of God spoke, being borne along by the Holy Ghost." II Peter, I, 21.

The word "borne along" is the literal translation of a Greek verb used in the New Testament when speaking of the action of the wind. It is also used to describe the descent of the Holy Ghost on the apostles on the first Pentecost: "And suddenly there came a sound from heaven, as of a mighty wind borne along, and it filled the whole house where they were sitting." But it was mighty only in sound and in the spiritual effect produced on the souls of the apostles.

Our Lord compares His Spirit to the wind. He says: "The Spirit breatheth where it will," or "The wind bloweth where it listeth." (John III, 8.) This explains one of the most remarkable features of Inspiration,—its fitfulness. The action of the Spirit of God on the delicately-strung human soul is like the action of the wind on an æolian harp. It does not rise and fall with the regularity of the tides. It does not swell and then die away in accordance with well ascertained laws of nature. It comes and goes by fits and starts, and in the most unaccountable manner. When you expect the harmony to continue to the end, so as to give a pleasing cadence to the ear, it suddenly dies away, and again as suddenly wakes up another melody still more sweet, and wild, and weird, only at its close to baffle the anticipations to which its opening had given rise, or continues to wheel around in circles over the same course like the whirlwind. This may explain the apparent lack of logical sequence in the ideas, and the frequent repetitions and abrupt transitions noticeable in Genesis and in the Gospels, and, in general, in all the biblical writers. As an instance of this fitfulness see how strange, how sublime, how overpowering is the majestic sweep of the exordium in the opening chapter of St. John's gospel! "In the beginning was the Word, and the Word was with God, and the Word was God." But the trumpet-note soon dies away and suddenly drops down to this prosy, unvarnished tale, "There was a man sent from God, whose name was John."

Another peculiarity of inspiration is its power of coördination. The Bible presents a unique phenomenon. There is nothing else like it in the entire range of literature. Here is a collection of writings belonging to different ages and to different countries, and composed on different occasions, and scattered over a period of 1,500 years, and over three continents, and comprising laws, histories, biographies, genealogies, speeches, proverbs, maxims, psalms, lamentations, hymns, songs, and canticles; yet, strange to say, all have a close affinity, all breathe the same spirit, and all display a remarkable general identity of scope and purpose. In fact, all the books of the Bible have as real and as close a unity as the several members of the human body, though so numerous and so unlike in size, shape and function.

How is it that the Old and New Testaments breathe forth Christ from almost every page? It is precisely because the spirit of Christ was once breathed into them, and because the one spirit of Christ pervades them all. Hence it is because the several books are so closely knit into one organic unity that no explanation of their origin is so satisfactory as that which St. Paul gives when he says: "All Scripture is inspired by God." For as one soul permeates and animates all the members of the human frame and makes them one body, so the one Spirit of God animates this collection of books and makes them one book—the Bible. And as there may be parts of the human body the use and purpose of which are unknown to even the best anatomists, though no one should say that a man would be as well off without as with such organs; so, too, it is possible to imagine in Scripture the presence of parts, the doctrinal and ethical significance of which might not be apparent either to the casual reader or even to the profound scholar. At the same time, we should not deny that such parts have some religious purpose. Though all are animated and unified by the same soul, yet not all the members of the human body are equally vital, not all are equally serviceable for every purpose. A man might lose a hand or a foot and yet live, and many a man has lost the hair of his head, and yet survived the loss. But the head itself and the heart are vital; if these are lost, all is lost. So it is one thing to say that every part of Scripture is in some

way useful, and it is quite another thing to say that all parts are equally useful, equally important, and equally serviceable for every religious purpose. Some avail mostly for dogma, some for moral, some for history. There may also be in Scripture parts of only secondary importance and of only subordinate significance, parts, if you will, which show a lower level of spiritual vitality, parts which, like the hair, the nails, the bones, and the callosities of the human body, have a lower grade of sensibility than other parts. Thus, many a part of Scripture is not so precious to us as the opening chapter of St. John's Gospel, or as the history of the bitter passion, death, resurrection, and ascension of our Lord. Also the command to salute the brethren, given at the end of St. Paul's epistles, has not so vital a connection with our spiritual well-being as the command, "The Lord thy God thou shalt adore and Him only shalt thou serve." Nor does the historical statement about Tobias' dog's tail play so important a rôle in the salvation of souls as does the statement in St. John's Gospel, "And the Word was made flesh and dwelt among us." For similar reasons we could more easily suffer the loss of the Book of Esther, as not forming so essential a part of the history of Redemption or of the development of revealed religion, and as not mentioning even once the name of God or of any divine attribute, than the loss of St. Matthew's Gospel.

Therefore, the conclusion that is warranted by the facts in the case is that there is in Scripture a twofold authorship; that is to say, the human agency employed in the composition of the books of Scripture was so combined with the divine that one indivisible work is the result. For, in spite of the presence of the human agency employed, the Bible is all divine; and in spite of the divine agency exercised in the work, the Bible is all human. These two elements everywhere coexist in Scripture. "Holy men of God spake," this is the human; "Moved by the Holy Ghost," this is the divine element. Therefore, in the composition of every book of the Bible two agencies were at work, God and man, and thus divine operation and human coöperation went hand in hand throughout. The Bible is the joint production of God and man. It is all *from* God, its first cause, and all *through* man its channel, and all *by* man, who

was much more than a lifeless channel. The primary cause or author of the Book is God ; the instrumental cause or writer is man. Consequently, the Bible is never to be regarded as merely human, nor as merely divine, nor as partly human and partly divine, but as all human and all divine. All human, because written by men, and all divine, because inspired by God. These two factors are everywhere present. Let both be recognized and accepted thankfully, since each contributes its share towards making the Bible more perfectly adapted, as an instrument of divine grace, to the needs of weak and erring men.

We admit this conclusion, and, along with it, we admit the difficulty and even the impossibility of clearly understanding how inspiration takes place. Yet we admit the fact, and we admit it on the very reasonable ground that difficulties that do not amount to absurdities or to impossibilities in the subject-matter, and which derive all their plausibility from our ignorance of the supernatural world, form but a very slight presumption against a thesis which is supported by abundant and reliable testimony, that is, by the clearest testimony of Scripture and the Church.

Inspiration being a vital operation of the Spirit of God on the spirit of man is necessarily a mystery, the mystery of it consisting in the exercise of God's supreme dominion over man and in the simultaneous exercise of man's liberty of will and of action. However, we should not forget that though the union and joint action of these two factors in inspiration is inexplicable, still the mystery is not peculiar to this case, it is not an isolated fact, it does not stand solitary and alone in the world of grace. We find something analogous to it in the adorable Person of the God-man, Jesus Christ. Whatever may be the Metaphysical difficulty in the case, it has been removed by the Historical fact ; for we may point to the Person of Jesus Christ and say: There is the solution of the problem.

III.—PARALLEL BETWEEN THE INCARNATE WORD AND THE WRITTEN WORD OF GOD.

The simultaneous co-existence and the harmonious combination of the divine and human in Sacred Scripture can be illustrated by the singular analogy between the divine and human in the Bible and the divine and human in Jesus Christ. In the first chapter of St. John's Gospel Christ is expressly called the "Word of God." "In the beginning was the Word, and the Word was with God, and the Word was God." Also, "His name is called the Word of God." (Apocalypse XIX, 13.) Sacred Scripture also is called, and is, the Word of God. The possession of the same name suggests that there is some remarkable resemblance between them. And a correct understanding of this marvellous analogy, which has often been remarked, will throw a flood of light on Holy Scripture and help us to solve many of the objections brought against the Bible in our days by some modern biblical critics of the destructive school. Let us examine this singular parallel.¹

Jesus Christ is theandric ; that is, in the one person of our Lord there are two whole, perfect, and entire natures inseparably bound together without confusion, without composition, and without conversion or absorption of either by the other. There is in Him the divine nature of the Logos, the Verbum, the Word, the eternal Son of God, the second Person of the ever Blessed Trinity ; and there is a human nature, complete and entire and consisting of an immortal soul, the most perfect ever created, and of a human body like ours, together with all the weaknesses, imperfections and limitations essentially necessary to human nature, "sin alone excepted." The humanity of Christ is not lost, it is not absorbed, it is not transfigured, it is not transformed, it is not confused with the divine. Though personally united with the divine nature, the human remains complete and entire, and performs all its functions no less really than if it were separate.

Similarly there are in the Bible two elements inseparably combined, but in such a manner that the divine does not absorb

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In the order both of nature and of grace God often uses human instruments to do His will. The message which He sends us, if not sent through men, could never come so fresh and natural as it does. It speaks to the heart, because, as the Talmud says, "Scripture speaks in the tongue of the children of men." Coming through this channel, it is colored by human experience, by human suffering, and by human reasoning. It is precisely this human tint, this stamp of the children of Adam upon the Book, that makes it appear so human, so congenial, so intelligible in many of its parts and so inexpressibly dear to us. It is this that touches the chords of Adam in our hearts and makes us love the Book as much as we do.

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Again the Incarnate Word Jesus Christ, though in two natures, is but one person. The divine nature so dominates the human that the personality of the eternal Word is the only person that remains. And His sacred body, though consisting of many members differing in dignity, is yet but one body, the soul animating and uniting all in one. So, too, the

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St. Luke tells us that our Lord "grew in wisdom and age and grace before God and men," else He would not have been a perfect man. It is natural that a human being should come to his full growth—to his mental, moral and physical development—only gradually. In some ways, at least experimentally, Christ's mind unfolded as any other child's would have done. His mother bestowed on Him the same care and gave Him the same nourishment that an ordinary mother gives to an ordinary child. She probably taught Him what she knew of the Scriptures; and had Him kneel with her and pray, "Our Father who art in heaven." Now, the development of the Written Word corresponds very nearly to that of the Personal Word. What is the meaning of development? It is a progression from a less perfect to a more perfect state; not from bad to good, but from good to better and then to best; not from falsehood to truth, but from less truth to more truth; from truth of a lower order to truth of a higher order. The human in Christ grew in age and stature, in wisdom and grace before God and men, but yet, while this was happening, He was very God, the second person of the ever Blessed Trinity.

There is an analogous growth in Scripture. The Old Testament does not contain so perfect a revelation as does the New. The law of Moses—the law of fear—was for the servants, the law of Christ—the law of love—is for the children, of God. Then, too, in the Old Testament, the Messianic idea, for instance, is more fully developed in the later than in the earlier books. In Genesis it is expressed merely by the "seed of the woman." From this protevangelium, from this rudimentary and initial beginning, the idea develops through many stages till it finds its fullest realization and consummation in the Infant in the stable of Bethlehem and in the divine Rabbi of Nazareth.

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the human, nor does the human contaminate the divine. In Christ the two natures are so intimately united that He is, at the same time, the Son of God and the Son of man. Also in Scripture the two elements coexist in such a way that the whole Book is, at the same time, the Word of God, and the Word of man. In each case we are unable to explain how this union is effected, but in neither case are we at liberty to solve the problem by denying either fact. At the same time we should not complicate the question by forgetting that the union of the divine and the human nature in Christ is hypostatical or personal, whereas in the Bible it is merely verbal. Therefore we worship and adore the incarnate Word as God ; but we do not worship the Bible, though we bow to its infallible authority.

The divine nature of the Logos never ceased to be a person, and the human nature never began to be a person, but was from the first instant of its existence united to the Person of the Word. This divine Word, the eternal Wisdom who was in the bosom of the Father from all eternity, is infinitely perfect. But as soon as He revealed himself in the flesh and became man, He partook of the imperfections of human nature. This was the necessary result, if He was to assume complete human nature and bring Himself down by His incarnation to the level of our apprehensions and of our human sympathies. Though there is much that may be thought humiliating in the possession of a human body, on account of its close resemblance to the beasts of the field, still it is not necessarily sinful, but only weak and imperfect. Hence we learn from the Gospels that the human nature of Christ was subject to the necessary limitations of general human nature. It was subject to natural laws, and even to human laws. He was subject to hunger and thirst, to weariness of body and anguish of mind, and became tired and sleepy, just as really as other men do. He was both weary and thirsty when he sat at Jacob's well and asked the Samaritan woman to give him to drink. He wept in sorrow. He prayed in agony. He was put to death. He was laid away in the tomb. In all this we see the weakness of His humanity. He calmed the fury of the storm at sea. He raised the dead. He rose from the dead, and ascended into

heaven in the presence of His disciples, and sent down His Spirit upon them on the first Pentecost. And in all this we see the evidence of His divinity.

So, too, the written word of God in its source or first principle, that is, when spoken by the mouth of God in heaven, is perfect. But as soon as the divine thought externalizes itself in language, clothes itself in human speech, and incarnates itself, so to speak, on the written page, it partakes of the many imperfections common to human language, "sin alone excepted;" that is, to the exclusion of error.

To some good Christians the presence of the human element in the Bible is disquieting. They have been accustomed to emphasize the divine element, not too much, but too exclusively, that is, to the exclusion of the human. They have imagined, "If the Bible is all human, it is all fallible; and if all fallible, it must be in part false, for 'to err is human.'" But they forget that, in Scripture, the human is so strengthened by grace, and so modified by the divine with which it is united and vivified that it cannot err. In this respect also the written word is analogous to the Incarnate Word; for on account of its personal union with the Logos, the Second Person of the Holy Trinity, the humanity of Christ, though really and truly, and in the strictest sense of the word human, is yet not ordinary sinful humanity. It is perfectly sanctified, and holy. Since, then, human nature is not essentially sinful, the Holy Ghost can make it infallible on such subjects as require infallibility. Because inspiration is not sanctification, the writers of Scripture, though "holy men of God," may not have been absolutely sinless; yet they committed no error in what they wrote. This result was easily brought about, because the freedom of the human will is no obstacle to the designs of Providence. God can arrange all things with such consummate skill and can direct all with such far-seeing wisdom as to be able in the end to bring about any desired result, and bring it about, too, with the co-operation of man's free will. By regulating the influences that work upon a man, by enlightening his understanding, by terrifying him, or by dispensing His graces more abundantly, God can move, without forcing, the

free will, and can determine it to do any act which He has absolutely decreed shall be done. All this God effects without interfering with man's liberty of choice and with his spontaneous concurrence. As instances of this, Jonas, rather than prophesy, fled from the face of God. Ezechiel procrastinated. Jeremias refused pointblank to play the rôle of prophet. But in the end they prophesied all the same.

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And why should there not be a growth in the truth revealed in Holy Writ? The discovery of the divine will to man is gradual—a truth here and a truth there, but not all truth at once. Even in the religious conceptions of God's chosen people there was a gradual development observable throughout the books. No generation reached the limits of truth at once. Neither nature nor grace proceeds by sudden leaps and bounds. The veil concealing revealed truth was not lifted suddenly, but gradually drawn aside. "God at sundry times and in diverse manners spoke in times past to the fathers by the prophets; last of all, in these days He hath spoken to us by His Son." The greater perfection of the New Testament revelation only shows that that of the Old Testament was imperfect, but not that it was false.

During Christ's childhood and youth at Nazareth His time was frequently taken up with the requirements of daily life, with acts of charity, with acts of courtesy oft repeated, with innumerable apparently trivial actions common to the daily routine life of ordinary mortals. Our social existence is largely made up of these details, and no matter how eminent or above his fellows, no man can escape them. So, no doubt, Christ in his constant contact with his fellow-men, not to be wanting in ordinary civility, must have repeated time and again those many commonplaces by which the business of life is carried on. He sat at men's hearths, He accepted their invitations, He went to their entertainments, He sympathized with their pursuits in life, He entered into their circle of ideas, He spoke their language, their dialect even, with its peculiar barbarisms and solecisms. He was an honored guest at their weddings, as He was at the marriage feast at Kana in Galilee. He was a mourner at their funerals, as He was at the grave of Lazarus. He worshiped with them at the temple or in the synagogues, as He did the day He read for them the prophecy of Isaias concerning Himself. He must often, with His mother at Nazareth and with others abroad, have spoken about things that seemed not to have any, even the remotest, bearing on the great work of redemption for which He was sent into the world. In fact, this perfectly natural way of acting gave frequent occasion to misunderstandings; for, seeing

how thoroughly human He was, they would not believe that he was at the same time thoroughly divine—God himself. They said to one another: “Is not this the carpenter, the Son of Mary?” and they were scandalized in regard to him.

So neither could the Written Word well be perfectly human, unless it shared in the imperfections of human language and in the limitations of human thought. The sacred writers were not exempt from some, at least, of the general characteristics of their contemporaries, and had the same faults of style and diction. They give us long lists of names of persons and places of little or no interest to us, endless genealogical tables, minute details of a purely local, national, or personal character, and sometimes date their books by mentioning the secular princes ruling at the time, just as profane writers are wont to do. They are full of repetitions and abound in things that appear to have no bearing on the end for which Scripture was written. Many of them wrote, not in elegant Greek or Hebrew, but in a debased dialect, full of Aramaisms and popular idioms, and not at all conformable to the standard of literary excellence. Another remarkable peculiarity is that neither logical nor chronological nor ontological order generally prevails, nor any describable sequence of ideas. All this is very natural and to be expected. For the spirit of God, in moving holy men to write, did not make a new language for itself, but simply took and used that which it found ready at hand. We may trust God to impart to a book, in whatsoever language written, whatever character is needed to make that book a fit vehicle for the communication of divine truths to men. Inspiration is the kernel, not the shell; it is the light, not the lamp, and it majestically tolerates, while using, the inelegance of the medium through which it shines. It grandly ignores trivial verbal inaccuracies, grammatical defects of style and diction and imperfect physical science in its writers; but it blazes forth with a divine radiance, ever increasing, in all the divine truths revealed in the Biblical writings, and carries us on with an irresistible sweep to a higher revelation of God and to a fuller manifestation of His will.

Christ, the personal word of God, occasionally allowed rays of that glory which He had from eternity in the bosom of the

Father to flash forth from time to time to strengthen the faith of His followers. He was transfigured on Mount Thabor ; He stilled the winds and the waves of the sea ; He forgave sin ; He opened paradise to the penitent thief, and in other ways showed His divine nature.

So, too, a divine glory shines forth in Sacred Scripture. It calms the storms of passion raging in the human breast, it opens paradise to the penitent, it expels the demons of vice from the heart, it reaches from the beginning to the end, from eternity to eternity, from Genesis to the Apocalypse, from man in the state of original innocence and sanctity in the Garden of Eden, to man redeemed from sin and restored to his primitive condition in the heavenly paradise. Beginning with creation out of nothing, it points the way to the remotest future, to the second advent of Christ, to the general resurrection and last judgment ; then up to the heavenly Jerusalem, the city of God, and to the Lamb that sitteth on the throne.

To conclude, if Christ were not also human, we should not have the comfort of feeling that He sympathizes with us, as we know He does. "We have not a High Priest who cannot have compassion on our infirmities, but one tempted in all things, as we are, yet without sin." And if Sacred Scripture were not human as well as divine, it would not appeal so powerfully to our sympathies, to our affections, to our conscience.

CHARLES P. GRANNAN.

ON NATIVE INDIAN PICTOGRAPHY.

The various methods invented by man to graphically express his thoughts form one of the most interesting subjects for contemplation and investigation.

All the known alphabetic characters are believed to have originated in pictorial outlines of objects which were, no doubt, intelligible to diverse peoples regardless of their respective languages. These pictorial representations, or ideograms, were slowly conventionalized either through frequent repetition for use, by less careful portrayal, or by intentional simplification of outline, so as to lose much of their original form, thus gradually reaching that stage known as the hieroglyphic, from which, by further interesting processes of evolution alphabetic characters, or phonograms, were created. The length of time occupied in attaining this brilliant achievement it is impossible even to conjecture. The oldest Egyptian record extant is believed to be of about the forty-seventh century B. C., at which time the hieroglyphic system of writing appears to have been an old one with an inconceivable past behind it.

It has been affirmed that various peoples throughout the world, however remote from one another, pass through like stages of intellectual development, and it appears from a careful examination of all available material, as well as special researches among numerous Indian tribes of North America, that the Western continent affords the best field for the study of various primitive attempts to record ideas by means of picture writing; for here the practice survives in various stages of development, as well also as the active survival of gesture language upon which so much depends in the study and interpretation of pictographs. Furthermore, the numerous scripts of the Old World appear to have passed beyond that stage in which the various concepts giving birth to the several individual phonograms might have been readily perceived and compared with the archaic prototypes.

In North America is found an abundance of evidence indicating the existence of three distinct varieties of picture-writing :

I. The more modern practice of etching on walrus ivory, as by the Innuït of Alaska ;

II. The pictorial and mnemonic records, on skins and birch-bark, of the Sioux and other prairie Indians and the Ojibwas of Minnesota ; and

III. The highly developed symbolic—and to a certain degree syllabic—paintings and sculptures of the Maya and Nahuatl of Central America and Mexico.

Numerous and remarkable petroglyphs well known in various portions of the North Atlantic coast states, in the valleys of the Susquehanna, Allegheny and other large rivers, and in the arid regions of Owens valley, California, and the northern area of Arizona, all of which—with the exception of some of the last named—are deemed as prehistoric, will not be specially recognized in this connection. Neither will be recognized such other processes of communicating intelligence, as notched sticks, various rudimentary forms of knotting cords or thongs—suggesting the more highly developed quippus of the ancient Peruvians and Chinese—; the different bands, belts, and like articles decorated with quills, shell and porcelain beads ; and the practice of tattooing, as best exhibited among the Haida Indians of Queen Charlotte's Island.

As the III. variety of picture-writing is also an art of other days, we have remaining in practice, at this date, but the I. and II. varieties, both of which will be commented on at greater length. The II. variety, of which the second group pertains to the mnemonic records of the Ojibwa—is now almost discontinued, being practiced by but a few old shamans, and may for all practical purposes be deemed obsolete.

The graphic art of the Innuït, at first glance, appears peculiar and unique, though upon closer study it seems to partake of the pictorial work of the plains Indians, as also of the more highly developed mnemonic and symbolic characters of the Ojibwa.

To more intelligently appreciate the differences to be noted, it will be necessary to call attention to the customs and en-

vironment of the tribes spoken of. Until quite recently gesture language was very commonly practiced over the greater portion of the western United States, and more especially in that area known as the "high plains," over which the different buffalo hunting tribes were frequently, if not almost constantly, thrown in contact with one another, and being generally unfamiliar with each other's oral speech, necessity brought about the development of gesture language as a simple though perfectly satisfactory means of intercourse.

Thus, in many of the pictorial records of the plains Indians, particularly the Sioux, Cheyennes, and Comanches, are perceived various attempts at the graphic reproduction of gesture signs, especially of subjective ideas which it would be otherwise impossible to record. It is in the delicate outlines or etchings made by the Innuits, however, that gesture signs, and the activities of daily life, are most forcibly and artistically depicted.

It is true that in the shell heaps of the Aleutian Islands fragments of bone harpoon points have been recovered, upon which were perceived markings or scratches which may or may not partake of the nature of property marks. These bone or shell heaps are of comparatively recent age, perhaps immediately antedating the advent of the whites. The sudden appearance, therefore, of an artistic graphic system in which the portrayal of gesture signs and signals form no inconsiderable part, is rather startling, from the fact that such a system, or stage of development, is not apt to be the result of independent invention and accomplished in a period covering little more than a century.

Upon a careful examination of all available Innuits materials bearing pictorial records, or only simple decorative signs, several interesting facts appear:

First, that the Innuits east of Point Barrow, including those even of Labrador and Greenland, exhibit but little artistic expression, and that this is confined chiefly to lines, dots, and other similar rudimentary markings which are employed almost wholly for decorative purposes. This does not refer to various kinds of carvings and outlined flat figures in bone or ivory which are intended to be stitched to clothing, a custom

very much resembling a practice of the Finns. Neither does this refer to the custom of stamping designs upon cloth or buckskin, a practice apparently learned from several Algonkian tribes with which some of the Hudson Bay and Labrador Innuits come in contact.

Second, that the Point Barrow natives are apparently but moderately advanced in the art of recording tribal or individual events, customs, etc., and that most of their ivory utensils are not decorated ; but that where attempts at beautifying are apparent, only those designs are adopted which suggest or require the least amount of manual exertion and artistic ability, so that straight incisions, creases and grooves are most numerous ; while nucleated circles and concentric rings are incised, the latter apparently by means of imported metal tools.

Third, that the engravings on ivory and bone from the northern portion of the west coast of Alaska, embracing the region about Kotzebue Sound and northward, and including the Diomed Islands and the opposing coast, as well as the area occupied by the Asiatic Innuits, are more deeply and crudely cut, as shown in the broader and bolder lines seen in the products from any other area.

Fourth, that the general results in graphic portrayals are more artistic among the natives of Bristol Bay and Norton Sound, and improve in delicacy of engraving toward the southward even to and including the Aleutian Islands ; that the portrayal of animal forms is accomplished with such fidelity as to permit of specific identification ; that the attempt at reproducing graphically common gesture signs becomes more frequent, and various instances of the successful portrayal of subjective ideas also occur.

In North America the study of prehistoric trade-routes, or culture-routes, has thus far received but a limited amount of careful attention, but some instances of curious results of inter-tribal traffic have been observed. Frequently designs of a specific character, such as may be termed peculiar to a special tribe, are carried to remote localities and there adopted by other tribes of an entirely different linguistic family, whereas the same design or pattern of the former may not produce the slight-

est apparent effect upon the recognized art designs or ornamentation of an adjoining body of people of a like linguistic family and with whom there may be frequent social intercourse. This is accounted for, in the instances in mind, because of the absence of like materials and resources quite necessary for a faithful imitation of the imported pattern, the original being fully recognized as a cult symbol, and any alteration, however slight, would immediately provoke the anger of the gods. Therefore, a remote body of people, whose cult beliefs are different and who would perhaps not recognize the sacred or mystic import of a symbol, might readily and without any hesitation adopt such pattern as might suit one's fancy, and subsequently alter it to conform to the shape of the material upon which it would be imposed by incision, impressed in color, or otherwise.

The northwest coast of America, between Puget Sound and Kadiak, is an excellent illustration of a culture-route, and the arts of the various Selish tribes are traceable over a wide area. The peculiar designs of the Haida, both in sculpture and in tattooing, have been gradually carried northward into the territory of the Thlinkits, the Kadiak, and have been even recently adopted, to a limited extent, by Innuits westward of the latter.

Another trade-route which appears to have been of importance on account of the introduction of peculiarities in picture-writing and decoration is by way of the Yukon River, and its connection between the western Innuits and the Kenai Indians of Eastern Alaska, and through them with the Chippewayan tribes on the British side of the boundary, the last named tribes being the northern representatives of our own Apaches, Navajos and others.

The most important culture-route, in fact one of the earliest to influence the crude arts of the Innuits, and probably to give origin to picture-writing among them, was by way of the Diomed Islands, when the natives came in contact with the Cossack outposts in Eastern Siberia.

The traffic which naturally resulted brought among the American natives various articles of Russian manufacture, among which, no doubt, were ikons and other Christian and ecclesiastical objects and prints, articles which are usually highly decorated in both design and color. Such objects would most

inevitably tend to influence the simple art of a people who were naturally given to the ornamentation of various utensils and weapons, as also articles of clothing.

The materials employed by the Innuït upon which to portray pictographic and decorative designs consist chiefly of walrus ivory, though reindeer horn, bone, and rarely wood appear to be utilized. Animal skins, as used by inland tribes and the southern Indians, are evidently of extremely rare occurrence, as such animal tissues would rapidly deteriorate in a moist climate; and the adoption of pigments for picture-writing seems to be only occasional, and then in localities where such pigments may, as a rule, be procured from traders.

The evident development of picture-writing since the appearance on the Alaskan coast of the whites seems furthermore substantiated by the fact that metal tools were necessary with which to readily accomplish such labors. Flint, or chert, flakes are mentioned as having been used in remote times, but it requires steel pointed implements to incise figures such as occur in numerous records with which we are at this date familiar. The intrusion of a limited number of art patterns, and the rapid development of picture-writing, lead one to believe that the latter was furthermore stimulated by contact with visiting whalers and explorers, the latter bringing with them, perhaps, illustrated books and papers, while the seamen exhibited to the natives examples of so-called scrimshaw work—incised pictures on whale teeth, bone, or ivory, after which the incisions were blackened or otherwise colored so as to resemble an etching. In fact, several instances of the faithful reproduction of press illustrations have been noted by various authorities.

The greater number of records consist of the portrayal of personal exploits or the achievements of the villagers, of which the recorder was one; and of ceremonial records, embracing dances, and the invocation or supplication for good luck of various deities and medicine-men. Hunting and whaling scores are numerous, while mortuary records, geographic features, and natural phenomena are rarely indicated.

In numerous excellent illustrations of the frequent portrayal of gesture signs and signals—in which art the Innuït appear to surpass almost all other native American aborigines—there

is frequent evidence that this people had attained special proficiency in conventionalization ; though not that degree of skill or advancement, when ideas are represented by synecdoche—in which but a part of an object is given for the whole,—or by metonymy—when one thing is substituted for another, as the instrument for the work accomplished or the effect produced. On the contrary, however, the Innuit appear to be the only people who, on the hunting scores and in portraying the various animals hunted, so place the several outlines of animals in relation to that of the hunter, that all the game secured is placed with the head toward the latter, while those animals seen or desired, but not secured, are headed in an opposite direction.

Furthermore, in many illustrations indicating exorcism of demons, these evil beings are represented as various grotesque creatures or horned anthropomorphic beings, in the act of quitting the body of the victim, and over which the shaman is shown in the act of operating to encompass such results for their expulsion.

It seems rather singular that the Innuit of Greenland should be so far behind their western kinsmen in pictography, especially in view of the fact that they have had intercourse with Europeans for a period of time covering, perhaps, nine centuries. Still no eastern forms—types—occur, neither is their picture-writing further advanced than the production of a few pencil sketches on paper, made to order, and their almost exact counterpart of sketches as made by the average American schoolboy. Such drawings were made for Dr. Rink, the Danish antiquarian, and no advancement has appeared since that time.

The II. variety of pictography embraces the art of the plains Indians, and of the Ojibwa of Minnesota. This variety is furthermore divisible into two chief groups. The first pertains to the objective representation of ideas as commonly found among the Sioux, Cheyenne, Arapaho, and other tribes, as illustrated in an Indian's census, winter counts and war records ; by representations of dances in which occur various styles of facial decorations and numerous odd marks upon the person or clothing of the Indian denoting personal exploits

and insignia of brave deeds. The head plumes are also often marked in pictographs to indicate the status as a warrior of the individual so designated.

To be able to interpret such pictographs it is necessary to thoroughly understand the tribal and genetic organization of the people making the record, the cult beliefs and ceremonials, social customs, mythology, and many other minor details of daily life embracing dress, ornamentation, etc. Not least is the knowledge of the gesture language, and especially that group of gesture speech to which the principals belong; such being often modified, and different from other gesture groups, because of different environments, resources, and customs.

The second group comprises the cosmogony charts and mnemonic records and charts of the Ojibwa Indians, and the Walum olum of the Delawares. The last named is really only a mnemonic chant pertaining to the Indian cosmogony.

These records are in nearly every instance made upon the thin elastic bark of the white birch, which occurs abundantly in the territory of the Great Lakes. Very rarely do these Indians adopt the tanned buckskin, so universally employed by their western neighbors. The figures are outlined and incised by means of a sharply-pointed piece of bone or iron. Thus delicate hair-line incisions, or rather depressions, result, which are permanently impressed upon the delicate layers of bark, layers like the leaves of a book between each two sheets of which a thin, almost imperceptible layer of resin occurs. As such records attain greater age the incisions appear to become a little sharper, or more accentuated, because of the slight drying and shrinking of the resin and the sheets. One very remarkable scroll, nearly ten feet long, was discovered at an isolated village in northern Minnesota where it had been hidden for a long time. From various sources of information, as well as collateral evidence, this scroll must have been at least over one hundred years old, yet it had changed but little in coloration or by shrinkage. Other pieces in the possession of the same shaman were said to have belonged to very remote ancestors and medicine priests, and if comparison in coloration and other conditions may be made, they must have been at least four or five hundred years of age.

These mnemonic charts are very different from those of the first, or preceding, group, and seldom relate to exploits in war or the chase. They are part of the stock-in-trade of the medicine priest or shaman, who uses them at ceremonials of the cult society, at initiations of candidates, and for the instruction of candidates preparatory thereto.

The Indian tradition of the cosmogony and genesis of mankind from the basis of the cult ceremonials, and the ritual of initiation is merely the dramatization of that tradition. In some respects it seems to partake of a passion play, the candidate assuming the character of one of the deities and suffering in like manner, even unto death, as he whose career is thus typified.

It is but natural to expect that in symbolic picture-writing of this class, so long in use and handed down through many generations, there will necessarily be much conventionalizing and a vast amount of portrayal of ideas by synecdoche and metonymy. In fact, there are but few characters which are, *per se*, what they seem to denote. Only a full comprehension of the ritual itself, and comparative researches in various individual records and their variants, will aid one to clearly interpret such records.

Great difficulty is experienced at times in the interpretation of such individual charts because of variations in artistic ability of the recorders, exactly in imitation of the numerous styles of chirography met with in manuscripts. It is usually the old or infirm shamans who abbreviate and attempt simplification, thus causing differences in symbols of like significations even upon the same record.

The remote and isolated villages of Ojibwa Indians of Wisconsin and Minnesota, and throughout the area north of the Canadian boundary, afford a highly interesting field for research in the collection of such bark scrolls, and charts, and the oral information that may be obtained as pertaining thereto. Those charts are deemed exceedingly valuable and sacred, and the general belief is that their exhibition to the uninitiated would encompass the shaman's destruction. Only one course is open to the student, and that is adoption into the society ; so

that the preliminary instruction may be obtained, and the explanation of the symbolic writing fully understood.

A careful and protracted study of the Ojibwa mnemonic symbols reminds one of their resemblance, in many respects, to some of the Mexican symbolic ideograms. This resemblance is particularly noticeable in such characters as may be drawn synecdochically and to which are placed, in close contact, dots, or lines, to express numerals. In such figures the former denotes the feast, manido, exploit, or whatever may be intended, while the latter indicate number. Ceremonials are also sometimes noted upon the cosmogony charts in almost exact imitation of the Maya and Nahuatl forms.

Another highly developed form of Ojibwa pictography is indicated by an apparent approach to the adoption of syllabic characters. In numerous examples the figure or symbol portrayed is spoken of by employing only the first syllable instead of the entire number, where more than one are required for its designation. Further examination among the isolated bands of these Indians may afford more and better results than have yet been obtained. The subject is worthy of every effort while there is yet a condition of aboriginal life uninfluenced by intrusion of modern and more civilized customs from without.

From an investigation of the above named varieties of picture-writing it is ascertained that the more recently developed system of the Inuit presents many rudimentary forms of the objective portrayal of ideas, a study of which may be characterized as a preliminary course to the next higher stage, as in that of the II. variety, the one portion of which—still quite common as among the plains Indians—being on a higher plane in evolution and leading to the next group, as illustrated by the mnemonic and symbolic characters of the Ojibwa. This, in turn, naturally leads to the III. and last variety, that of the ancient peoples of Mexico, whose picture-writing had attained the highest development known on the Western Continent.

WALTER J. HOFFMAN, M. D.

UNIVERSITY EXTENSION FOR CATHOLICS.

During the season just closing, a very successful solution has been found for a very difficult educational problem among Catholics. As the solution was one of fact and not of theory, its story may not be devoid of interest for readers of the BULLETIN. The problem was: How to reach the large body of Catholics who, for one reason or another, have been educated in part or almost exclusively under non-Catholic systems, and who, consciously or unconsciously, have imbibed, and are, in great part, guided by prevailing philosophical and critical principles, which, from our point of view, are found to be logically inconsistent with intellectually sound Catholicism. There has been, perhaps there still is, among optimists, a disposition to deny the existence of such a problem because of the unreality of the facts upon which it is based. But for those who come in close contact with the Catholic people of whom we are speaking, both the problem and the fact are, unfortunately, too prominent to be blinked. It is rather paradoxical, but nevertheless true, that a considerable number of Catholics are blessed with obliquity of mental vision, inability to draw logical conclusions, because they remain steadfast in the practice of their faith in blissful ignorance of the fact that to be strictly consistent with their intellectual principles they should be pure materialists. Thus, for the sake of illustration, that large body of reading Catholics who loyally swallow all the resounding verbosity of Herbert Spencer, can scarcely realize that this philosopher, "whose synthetic philosophy towers superbly above all other philosophic achievements of the age,"¹ is an extreme materialist, who denies the slightest respectability to any hypothesis of special creation, and a reasoner who, by his admissions, destroys the value of his own theory, which *aliunde* is full of inconsistencies, contradictions, and philosophical absurdities. Now, Herbert Spencer and variations on his philosophy, form

¹Herbert Spencer: *The Man and His Work*, Prof. William Henry Hudson, *Popular Science Monthly*, February, 1897, page 435.

almost their entire intellectual equipment,—still they believe in God, in a special creation, etc. Similarly their ideas of education and educational systems are derived from Compayré, Bain, Quick, Painter, Rosenkranz, etc.; yet they believe that the Catholic Church is not the foe of education, and has not enslaved the human intellect. Really, we should be grateful that people are not ruled by logic. But, likewise, we should not be astonished if they choose wrongly whenever it comes to a serious question of reconciling their faith and their pseudo knowledge. That this state of affairs exists is known or can be known by every one who is familiar with the finished product of the education given at least in our New York normal or public schools. To remedy it the Reading Circle movement was started. This prepared the way for the Catholic Summer School. One of the most striking proofs of the necessity of that institution was afforded by the unanimous testimony given by a number of experienced school teachers after one of Father Doonan's lectures in metaphysics, namely, that they had held wrong philosophical principles throughout their whole education and teaching. At the close of the first session at New London, a plan for a winter course of study and lectures was proposed to meet the want that was clearly recognized, but no practical effect could be given to it through inability to meet the financial expenses involved. The action of St. Francis Xavier's College of New York, in admitting women to the course of ethical lectures, solved the problem for one year and in one direction, but the unfortunate rescinding of that action only intensified the need that had thus been recognized. The crisis was precipitated, strangely enough, by the school reform agitation in New York. That accomplished at least one distinct good. It impelled many of the teachers to busy themselves with their own intellectual advancement. Opportunities to do so under secular auspices were not, and had not been wanting. But the work of the Reading Circles and the Summer School had, at length, aroused Catholic teachers to the dangers of modern philosophies, and the knowledge they had acquired through these agencies of the solidity and depth of Catholic philosophical teaching had made them eager to place themselves under distinctively Catholic

influences. A young woman, herself a school-teacher, guaranteed the financial success of the undertaking, and then made a formal and peremptory demand that something be done for this large body of Catholic women, who otherwise would be forced by the exigencies of their position to place themselves under instruction that we hold to be hurtful. With the issue thus plainly stated there was only one thing to be done. With many misgivings, a tentative prospectus was issued last June announcing a course of fifteen lectures in psychology to be begun in October, and promising, if that were successful, a supplementary course of five lectures in literature. The result of the experiment was awaited with considerable anxiety. To the large majority of those addressed, the lectures were entirely unknown. Several courses of lectures on identical subjects were to be given under the auspices of long-established societies, and by men well known in New York educational circles. It was urged that these latter lectures would be more practical for teachers, because they would enable them to answer more questions in the dreaded examinations for promotion, the lecturers being more in touch with the methods and requirements; and the strength of this objection was fully acknowledged: one Catholic teacher, in fact, when reproached by another for refusing to come to our lectures, and for assiduously studying books which it was shown would be sure to endanger her faith, pointedly defended herself by claiming that they, at least, would help her to pass the examinations. Finally, some timorous souls were afraid that those who attended our lectures would come under the ban for being too pronouncedly Catholic. But the event left no room for argument. The first lecture was attended by an audience of about five hundred, among whom were a number of Protestants and some Jews. The attendance, on the whole, increased rather than decreased, and there were really more people in the hall at the closing lecture than at the opening. On one very stormy day, the severest of the winter, there were over two hundred present. Five hundred and ninety-eight course tickets were actually taken for the entire course; thirty-one for the Literature Course alone; eleven single admission tickets were sold for the Psychology, and one hundred and twelve for the Literature Lectures.

With regard to the character of the audience, it may be well to note that for the most part it was composed of public school teachers, among whom were many principals of important schools. There was a very slight representation of lay teachers from the parochial schools. A fairly large number of ladies of leisure, members of convent Reading Circles, and graduates of convent schools and a sprinkling of men made up the company.

The methods followed were those prescribed by the University of the State of New York, of which we became a registered University Extension Centre. After each lecture a class was held, the class work consisting not only of interrogation, but of written exercises in the shape of theses, covering the ground gone over in the lectures.

There is a widespread disposition to sneer at the educational work done by University Extension Centres, and by those who, themselves, are profoundly learned, it is held in contempt. This attitude is theoretically justifiable, but the facts are these: while a considerable part of this work is not only superficial, but what is worse, tends to increase the appalling superficiality that pervades our society and masquerades as intellectual culture, yet the work can be done thoroughly, and the results can conscientiously be considered as thoroughly good. To secure such results the error of seeking to cover too much ground must be avoided, and too much comprehension of elementary principles on the part of the audience must not be assumed. This we soon discovered; and, therefore, although our syllabus announced that we were going to cover the field of the important questions of psychology in fifteen lectures, we confined our efforts to an endeavor to convey what we conceive to be a fairly reasonable idea of the problems of lower psychology. Finding no text-book adapted for just this purpose we distributed mimeographed copies of our notes, forty-six pages in all, containing about 25,680 words, 600 copies for each lecture, a total of 27,600 pages of matter distributed, so that during the lecture the speaker could be followed intelligently, the hearers having become familiar with terms and definitions by previous reading of the notes; and the notes themselves could afterward be consulted with more

interest in the light of the full development they had received in the lecture. Accessible references were suggested. In the class, after the lecture, the whole matter was again gone over in the form of question and answer, whilst the necessity of writing theses gave an opportunity of amplifying the notes, and exhibiting the results of personal reading. Questions, previously submitted in writing, were answered from the platform. These questions were significant as showing the difficulties in the minds of those proposing them, the trend of their thoughts, and the necessity of correcting radically wrong principles unconsciously held.

Moreover, even granting that the work done was superficial, it will be conceded that it is much better to have the superficiality at least of the right kind. The large majority of those who came to these lectures would have gone elsewhere; and we happen to know that their studies would not have gained in depth, and would have received a different coloring.

Again, it was urged that what these people needed were lectures in logic rather than in psychology. As matter of fact they wanted psychology, driven to that want by a very practical necessity. The chances were against their coming to lessons in logic; but we feel certain that while listening to lectures in psychology they realized their need of logic, as was made evident by a distinct demand for a course in logic.

In these lectures, after defending the claims of lower psychology to serious consideration, we discussed the definition of life, examining with critical care that formulated by Spencer in his "*Principles of Biology*." Then followed an exhaustive examination of the differences between living and non-living bodies. Quite a complete summary of these differences was gathered from *Liberatore*, *Urráburu*, and *Mivart*. The importance and practical nature of this subject was enlarged upon, and by quotations from popular scientific writers it was shown that it was highly useful to be familiar with the arguments that established the specific and essential difference between living and non-living matter. The next question considered was the demonstration of the proposition that the vital principle was distinct from, and superior to, the natural forces.

The argument drawn from the difference in the action of these forces in the living and non-living body, was found particularly effective. Having demonstrated the existence of some vital principle, an inquiry into its nature followed. This inquiry was limited, particularly, to the nature of the plant soul. It involved the very difficult task of conveying some notion of the scholastic doctrine of matter and form to minds untrained upon them in scholastic teaching and unacquainted with scholastic terminology; and of impressing the difference between subsistent and non-subsistent forms. The matter of distinction between plant and animal life was only touched upon, as it was felt that the real question centered in the various theories of the origin of life. These were very fully discussed in six lectures, the effort being to refute the theory of evolution or atheistic transformism, rather than to consider the theories of restricted transformism. The controversy concerning man's body, now going on in certain English periodicals, was pointed out with a view to encouraging individual study of that exceedingly interesting subject.

In the supplementary course in literature given by Dr. J. Talbot Smith and Rev. William Livingston the general theme was, "The Spiritual Element in Literature," illustrated by critical appreciations of Newman and Emerson, Shakespeare and Shelley, Tennyson and Longfellow. From this statement it will be seen that, granting superficiality in the highest degree if you will, a positive and well defined residuum of solid truth was secured by stating with emphasis the position of sound Catholic philosophy with regard to some of the most important questions agitating the human mind.

JOSEPH H. McMAHON.

THE VATICAN ARCHIVES.¹

Of all the great repositories of historical documents, the archives of the Papacy possess the widest interest. Other collections may contain more for the history of the particular country in which they have been formed, but the papal archives are unique in being international and universal as well as local. During a period of seven hundred years the collections of the Vatican reflect every phase of the many-sided activity of the Roman church; of the first importance for Rome and Italy, they at the same time contain material for the history of every part of Catholic Christendom, however obscure or remote. "The keys of Peter are still the keys of the Middle Ages," wrote Pertz after his brief visit to the Vatican in 1823, and recent explorations under more favorable conditions have served to confirm the statement as essentially true of the later Middle Ages and to extend it to certain parts of the modern period as well.² It is the purpose of this article to indicate briefly the nature and contents of the Vatican collections and to show the directions in which research and publication have been most active since the archives became accessible to students.

It should be remarked in the first place that the present papal archives, extensive as they are, represent but a relatively small portion of the immense mass of documentary material which has at one time and another been the property of the Holy See. Besides the enormous number of documents which were sent out from Rome in the ordinary course of business and which one would naturally expect to find elsewhere, the papal archives themselves have suffered from carelessness,

¹This article first appeared in the "American Historical Review," for October, 1896, and is reprinted by permission of the editors of that Review. My acknowledgments are due to Father Ehrle, prefect of the Vatican Library, and to the sub-archivist, Monsignor Wenzel, for their kindness on the occasion of my visits to the Vatican; I am also indebted to Hofrath von Sickel, director of the Austrian Institute in Rome, and Dr. von Ambros, its librarian, to M. Coulon, of the École Française de Rome, to Señor Altamira of Madrid, and to Dr. Koser, director of the Prussian archives.

²"Archiv der Gesellschaft für ältere deutsche Geschichtskunde," V. 24. Compare Munch, "Aufschlüsse über das päpstliche Archiv," Berlin, 1880, and Pastor, "Geschichte der Päpste," preface to Vol. I.

plunder, and the accidents of numerous transfers, so that the greater part of their contents has passed into other hands or disappeared. While a place for the deposit of archives is known to have existed at least as early as the time of Damasus I. (366-384),¹ the present collection contains no originals of the early Middle Ages and no continuous series before the pontificate of Innocent III., and in the subsequent period the gaps are numerous and important. Serious losses undoubtedly took place in the course of the wanderings of the archives from place to place during the Middle Ages and again on the occasion of their transportation to Paris by order of Napoleon I., but it must be remembered that the documents were preserved primarily, not as historical sources, but as evidences of papal rights or as aids in the transaction of business, so that much which would have the greatest interest at the present time was doubtless destroyed by the officials themselves as of no permanent value. Then, too, in the sixteenth and seventeenth centuries, when no clear distinction was made between public and private papers, the archives suffered from spoliation at the hands of the great Roman families, in whose private libraries many important series must now be sought. The Archivio di Stato at Rome also possesses documents and copies from the papal archives, acquired by the suppression of the Roman monasteries, and other pieces are still more widely dispersed.

The various groups of documents which at present constitute the archives of the Holy See do not form a single collection under one administration. Just as in the various European states there exist separate archives of war, of marine, of foreign affairs, etc., so the various departments of the papal administration have their own repositories of records and papers, separately preserved for the recent period at least, when, as in some cases, the earlier series have been united with the central collection. It thus happens that besides the principal collection there exist the separate archives of the Consistory, the Dataria Apostolica, the Tribunal of the Rota, the Secretaria Brevium, the Signatura Gratiae, the Penitentiary,

¹Bresslau, "Handbuch der Urkundenlehre," I, 120 ff., where the history of the papal Archives is briefly traced.

and the Master of Ceremonies, as well as those of the Congregations of the Index, the Holy Office, and the Propaganda, and the special repositories belonging to the Sistine Chapel and St. Peter's.¹ The only one of these that is regularly open to scholars is the more ancient part of the archives of the Consistory, whose historical importance was first brought to general notice by Pastor. Here are preserved the acts of the Consistory and many of the reports and documents upon which these acts are based, extending from the beginning of the fifteenth century and containing material of much value for ecclesiastical history.² The archives of the Propaganda, for some years open to the public, are now closed, as their constant use by investigators was found to interfere with the current business of the congregation. The series, which is unusually complete, is of capital importance for the missionary labors of the Roman church; it has been explored particularly with reference to the religious history of Bohemia and the southern Slavs.³ Leaving these lesser archives aside, we shall concern ourselves chiefly with the great central collection, the Archivio Segreto Vaticano, the Vatican archives *par éminence*.

Long kept rigorously secret and utilized only by the officials and by certain exceptionally favored historians,⁴ the Archivio Segreto has become freely accessible to students through the liberality of the present Pope. The signs of the new policy were manifested in 1879, when Professor Hergenröther of the University of Würzburg, one of the foremost Catholic scholars

¹See particularly Hinojosa, "Los Despachos de la Diplomacia pontificia en España," I. xiv. l. v. The archives of the Master of Ceremonies, containing the greater part of the papal diaries, are described by Ehrle in the "Archiv für Literatur- und Kirchengeschichte des Mittelalters," V. 587-602.

²See Pastor, "Geschichte der Päpste," I. 2. 689-693, and the detailed account, with extracts, in Korzeniowski, "Excerpta ex libris manuscriptis Archivi Consistorialis Romani," Cracow, 1890.

³On the archives of the Propaganda in general and the various publications from them before 1887, see Pieper in the "Römische Quartalschrift," I. 80-99, 259-265.

⁴Pertz, Palacky, and some others succeeded in seeing certain pieces; the Norwegian scholar, P. A. Munch, seems to have been the only outsider admitted within the precincts of the archives, and this by a stretch of authority on the part of Theiner, who was then archivist. Cardinal Antonelli is said to have remarked that only three persons were allowed to enter the archives, namely, the Pope, the archivist, and himself; whoever else entered without a special dispensation of the Pope was ipso facto excommunicated. "Archivalische Zeitschrift," V. 78.

The earlier publications from the archives lie beyond the scope of this article; that they were by no means inconsiderable may be seen by reference to the various Bullaria, Raynaldi's continuation of the "Annales Ecclesiastici" of Baronius, and the numerous collections edited by Theiner.

of his day, was promoted to the rank of Cardinal and placed in charge of the archives, which were thus put on an equality with the library. After the necessary preparation had been completed, the archives were formally thrown open in January, 1881.¹ Since that date the archives have been enriched by the purchase of the Borghese collections and by the transfer of valuable series from the Lateran, a larger consultation room has been provided, and an excellent reference library, the Bibliotheca Leonina, has been formed for the use of workers in the archives and manuscripts of the Vatican.² Leo XIII. has in other ways shown his interest in historical studies, notably by the establishment of the Historical Commission of the College of Cardinals, for the encouragement of the study of history among the Italian clergy, and by the institution in the Vatican of courses of systematic instruction in paleography and diplomatics, designed particularly for the training of archivists for the pontifical and other ecclesiastical archives.³

Access to the archives is now granted by the prefect to every investigator, without distinction of faith, upon the receipt of a written application accompanied by an official recommendation or a personal letter to one of the archivists. The archives are open every morning from half-past eight until twelve, with the exception of Sundays, Thursdays, and festivals, and during the short vacations which occur at Christmas, Carnival time, and Easter. They are also closed from June 28 to September 30 inclusive, so that the actual number of working days averages scarcely more than three a week throughout the year. The well-lighted consultation room, situated on the ground floor, under the library and opposite the papal gardens, has seats for about sixty readers; although larger than the room formerly in use, it is frequently crowded, so that regular attendance is

¹Of the numerous articles called forth by the opening of the archives see in particular Gottlob in the "*Historisches Jahrbuch*," VI. 271 ff., and Löwenfeld in the "*Historisches Taschenbuch*," 1887, 261 ff. The attitude of Leo XIII. toward historical studies is set forth in an interesting letter to Cardinals Luca, Pitra, and Hergenröther, August 15, 1883, to be found in Vering's "*Archiv für katholisches Kirchenrecht*," L. 423 ff., and in a French translation in the "*Revue des Questions Historiques*," XXXIV, 323 ff.

²Opened in 1893. See "*Historisches Jahrbuch*," XIV. 477-483.

³The exercises of the school, which was established by *Motu Proprio* of May 1, 1884 ("*Studi e Documenti di Storia e Diritto*," VI, 106-108), are by permission open to others besides members of the clergy. During the past year they have been attended with profit by students of the American School of Classical Studies.

necessary to insure a place. Visitors are struck at once by the air of quiet activity which pervades the room, and the evident determination of every one to make the most of the short time at his disposal. In general, documents anterior to 1815 are freely communicated, although the archivists may reserve pieces of a private nature (*carattere riservato*) "which cannot be given publicity for reasons of public interest, religious and social." Notes and copies must be submitted to examination before being taken away.¹ Where the exact indication is known, documents are brought promptly, but every extended investigation is likely to involve numerous delays and difficulties, for while there are excellent inventories and indexes prepared in the last century, these are not freely accessible nor are their indications always sufficiently sure or precise. "It is true of the Vatican archives more than of others," says Sickel,² "that only a part of the material for a given subject lies on the surface; merely to get track of the rest requires, not only tedious search, but the active assistance of the officials, who alone are familiar with the contents and disposition of the archives and able to follow up what is scattered and misplaced." It should be added that the archivists freely and cheerfully give such assistance, so far as their time permits, and their helpfulness is warmly appreciated.

A description of the contents of the Vatican archives is a matter of some difficulty, as no general inventory has been published, and the system of classification is in many cases the result of historical accidents rather than of the application of any logical principle. In the following brief account emphasis has been laid upon the historical interest of the various groups of documents rather than upon the details of their arrangement.³

¹Regulations established by Motu Proprio of May 1, 1884. They are published, as of 1894, in the "Revue Internationale des Archives, des Bibliothèques, et des Musées," series "Archives," I. 97.

²"Mittheilungen des Instituts für österreichische Geschichtsforschung," XIII. 371.

³According to Ehrenberg ("Italienische Beiträge zur Geschichte der Provinz Ostpreussen," x.) the number of volumes in the Vatican archives is estimated at 2,450,000. Detailed descriptions exist for many parts of the collection; it would be a great convenience if some one would bring them together into a manual which should indicate, so far as is at present known, the character, number of volumes, and chronological limits of each series. At present the best summary account is that given by Langlois and Stein in their "Archives de l'histoire de France," 743-757.

Probably the most important section of the Vatican archives is the great series of *regesta*, consisting of copies of papal letters, which extends with few breaks from the time of Innocent III. The order of the letters in the volumes is roughly chronological; in course of time they were divided into various classes (*litteræ curiales*, *communes*, *camerales*), according to subject matter or form. Beginning with the papacy of Boniface IX., two series were kept, one at the Vatican and one at the Lateran, and we later find still other registers for the less formal types of letters—breves, signatures, etc.—which came into existence in the course of the fifteenth century.¹ To the historical student these volumes of registers are invaluable. They preserve the contents of a vast number of bulls and breves otherwise unknown, and even where the originals have been preserved, comparison with the registers yields important results for the science of diplomatics. As may be seen from any of the published volumes, the subject matter of the registers is of the widest possible variety, and relates to all parts of Christendom; nowhere else does one gain so vivid an idea of the widespread activity of the Papacy and its intimate relations to every phase of contemporary life. Besides constituting an official and unimpeachable source for papal history, the registers are of much importance for the local, and particularly the ecclesiastical, history of the various countries of Europe, and they yield valuable information for economic history and for the history of literature and the arts. Since 1881 the attention of scholars has been busily devoted to the registers, so that they may now be considered the best known portion of the archives. The registers of Innocent III. were printed by Baluze in the seventeenth century; those of Honorius III. have recently appeared as an official publication from the Vatican, while the registers of the other popes of the thirteenth century and of Benedict XI. have been undertaken by members of the French school at Rome, and those of Clement V. by the Benedictines at Monte Cassino. After the beginning of the pontificate of John XXII. the amount of material con-

¹ See Palmieri, "Ad Vaticanæ archivi Romanorum pontificum Regesta Manuductio," Rome, 1884, a useful inventory of the registers with some account of the history of the collection.

tained in the registers becomes so vast that scholars have given up the idea of publishing it in full, and have contented themselves with excerpting that which relates to each country or locality. The only general publication for the later period is the registers of Leo X., begun by Cardinal Hergenröther and discontinued since his death.¹

A valuable supplement to the registers is formed by the *libri supplicationum*, or records of the petitions in answer to which the papal bulls were issued, which often contain interesting matter omitted in the bulls. The series begins with Clement VI., but is by no means complete; it has been utilized particularly by Denifle, and after him by others who have concerned themselves with the history of universities.²

Scarcely inferior to the registers in interest, are the documents relating to the financial administration of the Holy See, which first become abundant toward the close of the thirteenth century, when the increased need of money and the decline of the income from the patrimony of St. Peter began to lead to the development of new sources of revenue and a more complete system of financial administration. Besides the financial material contained in the registers, of which a special series of *regesta cameralia*³ was formed under Urban IV., we have,

¹Pressutti, "Regesta Honorii papæ III.," Rome, 1888-1895. "Regestum Clementis papæ V.," Rome, 1885-1888; a concluding volume of indexes is in preparation. Hergenröther, "Leonis X. pontificis maximi Regesta," Freiburg i. B., 1884-1888. Of the series published under the auspices of the École Française the only publication as yet complete is the registers of Honorius IV., edited by Prou. The others are appearing with varying degrees of rapidity—Gregory IX. by Auvray; Innocent IV. by E. Berger; Alexander IV. by Bourel de la Roncière, de Loye, and Coulon; Urban IV. by Dorez and Guiraud; Clement IV. by Jordan; Gregory X. and John XXI. by Guiraud and Cadier; Nicholas III. by Gay; Martin IV. by Soehnle; Nicholas IV. by E. Langlois; Boniface VIII. by Digard, Faucon, and Thomas; and Benedict XI. by Grandjean. A number of letters from the registers of the thirteenth century, copied by Pertz for the "Monumenta Germaniæ Historica" in 1823, having recently been published under the editorship of Rodenberg: "Epistolæ sæculi XIII e Regestis pontificum Romanorum selectæ," Berlin, 1883-1894. See also the beautiful volume of facsimiles published by Denifle, "Specimina palæographica Regestorum Romanorum pontificum ab Innocentio III. ad Urbanum V.," Rome, 1888.

The more important of the local publications will be mentioned below under the countries concerned. For the numerous discussions of the diplomatic questions arising in connection with the study of the regesta, reference must be made to special works on papal diplomatics. An idea of the activity with which research has been carried on in the registers may be gained from Schmitz, "Uebersicht über die Publikationen aus den päpstlichen Registerbänden des XIII.—XV. Jahrhunderts vornehmlich seit dem Jahre 1881," in the "Römische Quartalschrift" for 1893 (VII. 209-223, 486-491).

²See in general Kehr, in "Mittheilungen des Instituts," VIII. 84 ff., and Erlar in "Historisches Jahrbuch," VIII. 487 ff.; and with special reference to the history of universities, Denifle, "Die Universitäten des Mittelalters," I. xx., the cartularies of Paris and Montpellier, and Fournier, "Les statuts et privilèges des universités françaises," with Denifle's additions.

³On which see Ottenthal, in "Mittheilungen des Instituts," VI. 615-626.

for the fourteenth and fifteenth centuries, six hundred volumes of *collectoriae* and nearly four hundred of *introitus et exitus camerae apostolicae*. The *collectoriae*, together with the related series *libri obligationum* and *libri solutionum*, contain reports of the collectors sent out from Rome into the various parts of Europe, records of payments made directly to the papal treasury, and minutes of the financial obligations of bishops, abbots, and other high ecclesiastics. In addition to their direct value to the student of papal finance, the reports of the collectors are of considerable importance for ecclesiastical geography and local history, and constitute a source of the first rank for the monetary history and general economic conditions of the period.¹ The *introitus et exitus* comprise two sorts of records, the books in which the various officials noted their receipts and expenditures, and the general accounts in which the items of the year were entered. Expenditures are given in minute detail, payments for oil and tapers, oats and fodder, the wages of the cook and other domestics appearing along with those for larger matters, so that an excellent idea is afforded of the daily life of the papal household.² Taken with the *regesta cameraria*, these accounts indicate very exactly the different directions of papal activity; they have been utilized by Ehrle and Faucon for the history of the papal library, and by Müntz and Faucon for the history of art, and are capable of furnishing information on many other subjects.³

¹Besides the earlier publications of Theiner and Munch, see especially Kirsch, "Die päpstlichen Kollektorien in Deutschland während des XIV. Jahrhunderts," Paderborn, 1894, and the first volume of the "Monumenta Vaticana Hungariae." The *libri obligationum* have been of much assistance to Father Eubel, who is engaged in the preparation of a more correct *Series Episcoporum*. The value of the financial records of the Papacy as a source for local history is exemplified by Glaser, "Die Diözese Speier in den päpstlichen Rechnungsbüchern, 1317 bis 1560," published as Vol. XVII. of the "Mittheilungen des historischen Vereines der Pfalz" (1893).

²See, for examples, the first volume of appendices to the "Regestum Clementis papae V." Interesting items of household expenditure were published by Gregorovius in the "Historische Zeitschrift," XXXVI. 157-173, from volumes in the Archivio di Stato at Rome; Gregorovius was surprised at the simple and economical style of living they indicate among the Popes of the fifteenth century. On the abundant material for papal finance in the Archivio di Stato see Gottlob, "Aus der Camera Apostolica des 15. Jahrhunderts," Innsbruck, 1889, and Meister, "Auszüge aus den Rechnungsbüchern der Camera Apostolica zur Geschichte der Kirchen des Bisthums Strassburg," in "Zeitschrift für die Geschichte des Oberrheins," VII. 104-151. Papal accounts from the library at Prato are given in the "Archivio Storico Italiano" for 1884. In a recent paper read before the Académie des Inscriptions et Belles-lettres, Müntz has examined carefully the expenditures of the Papal court at Avignon, and the publication of this memoir will doubtless throw new light on this interesting subject.

³See the works cited by Langlois and Stein, 753. Hayn, "Das Almosenwesen unter Johannes XXII.," ("Römische Quartalschrift," VI. 209-219), publishes the first installment of a study of papal charities on the basis of the *introitus et exitus* of the Avignones period.

Recent researches in the archives have thrown light upon several of the sources of papal revenue, notably the *census*¹ and the annates², the taxes for the Crusades,³ the taxes of the chancery⁴ and the penitentiary,⁵ and the expenses attendant upon letters of provision⁶ and upon ordinations and consecrations at Rome;⁷ but many questions still remain obscure. Indeed, the whole matter of papal finance is one of the least understood subjects in the history of the Middle Ages, and this in spite of its great importance. The administration of the Roman Camera appears to have been exceptionally systematic and complete, as regards both division of functions and control, and its development and possible influence upon other systems possess special interest for the student of economic and institutional history. How far, if at all, the financial measures of the Popes contributed to produce discontent with the ecclesiastical system, is another problem whose solution can come only from a careful examination of the nature of the various sources of papal income, and the amounts actually collected in the various parts of Europe. Such questions have of late years begun to attract attention from scholars, and it is to be hoped that special studies in the archives will be continued until it will be possible to write, with impartiality and a full knowledge of the sources, an adequate history of papal finance.⁸

¹Fabre, "Étude sur le Liber Censuum de l'Église Romaine," Paris, 1892; see also his edition of the Liber Censuum and various briefer articles on the same subject.

²Kirsch, "Die Annaten und ihre Verwaltung in der zweiten Hälfte des 15. Jahrhunderts," "Historisches Jahrbuch," IX. 300-312.

³Gottlob, "Die päpstlichen Kreuzzugssteuern des 13. Jahrhunderts," Heiligenstadt, 1892.

⁴Tangl, "Das Taxwesen der päpstlichen Kanzlei vom 13. bis zur Mitte des 15. Jahrhunderts," "Mittheilungen des Instituts," XIII. 1-106; and compare Bacha in the "Compte-rendu des séances de la Commission royale d'histoire de Belgique," 1894, 107 ff.

⁵Denifle, "Die älteste Taxrolle der apostolischen Pönitentiare," "Archiv für Literatur- und Kirchengeschichte des Mittelalters," IV. 201 ff.; Lea, "The Taxes of the Papal Penitentiary," "English Historical Review," July, 1893.

⁶Mayr-Adlwang, "Ueber Expenserechnungen für päpstliche Provisionsbullen des 15. Jahrhunderts," "Mittheilungen des Instituts," XVII. 71-108.

⁷Schmitz, "Die Libri Formatarum der Camera Apostolica," "Römische Quartalschrift," VIII. 451-472.

⁸"Der Mangel einer vorurtheilsfreien, documentarisch gut belegten Finanz- und Verwaltungsgeschichte der römischen Curie während des Mittelalters gehört zu den empfindlichsten Lücken unserer historischen Litteratur." Tangl, in "Mittheilungen des Instituts," XIII. 1. Some phases of the financial history of the Papacy are treated by Gottlob, "Aus der Camera Apostolica des 15. Jahrhunderts," cited above; König, "Die päpstliche Kammer unter Clemens V. und Johannes XXII.," Vienna, 1894; Miltenberger, "Versuch einer Neuordnung der päpstlichen Kammer in den ersten Regierungsjahren Martinus V.," "Römische Quartalschrift," VII. 399-450; Kirsch, "Die Finanzverwaltung des Kardinalcollegiums im 13. und 14. Jahrhundert," Münster, 1895.

A source of great value for the history of modern Europe is found in the papers of the papal secretariat,¹ of which the most important are the instructions and reports of the nuncii, collected into six thousand volumes and classified into twenty-one groups according to the places where the nuncii were stationed. The various series of reports begin at different dates in the sixteenth century, and are far from complete, although the collections of the Vatican may frequently be supplemented by those of the private libraries of Rome. The reports of the nuncii have been examined for the history of several countries of Europe,—notably for that of Germany in the epoch of the Counter-reformation,—but their study is attended with various difficulties, and the amount so far published is relatively small. The origin and development of the system of permanent nuncii is itself a chapter of diplomatic history as yet little understood.² The collections of the secretariat also contain a great number of letters from eminent personages in all parts of Europe (*lettere di principi, cardinali, vescovi e prelati, particolari, soldati, lettere diverse*), belonging to the sixteenth, seventeenth, and eighteenth centuries, and useful for supplementing the correspondence of the nuncii, and as an independent source.

The archives of the Vatican possess several collections of a miscellaneous nature, many of them ill-arranged and as yet but little explored, comprised mainly in the series "Armario," "Instrumenta miscellanea," and "Instrumenta castelli Sant' Angelo." Their contents are of the most varied character, including numerous originals of imperial charters and papal bulls, letters of kings and princes, papal diaries, reports of visitations and proceedings before legates, and considerable material on purely Italian affairs. Important sections relate to the Great Schism and the Council of Trent.³

¹Friedensburg, in the "Nuntiaturberichte aus Deutschland," first series, I. xvi. ff.; Hinojosa, I. 1-24; Langlois and Stein, 751, 754; Cauchie, "De la création d'une École belge à Rome," 19-35.

²See Friedensburg's Introduction, and Pieper, "Zur Entstehungsgeschichte der ständigen Nuntiaturen," Freiburg i. B., 1894, intended as an introduction to an edition of the instructions of the nunci from the pontificate of Julius III. to the Thirty Years' War. Also various articles of Meister, especially "Die Nuntiatur von Neapel im 16. Jahrhundert," "Historisches Jahrbuch," XIV. 70-82. A good illustration of the historical value of the reports of the nuncii is found in Philippon's article "Die römische Curie und die Bartholomäusnacht," "Deutsche Zeitschrift für Geschichtswissenschaft," VII. 108-137.

³Langlois and Stein, 754-756; "Nuntiaturberichte aus Deutschland," first series, I. xix.-xxiii.; Kehr, "Die Kaiserkurkunden des vatikanischen Archivs," "Neues Archiv," XIV. 343-376;

From the very opening of the Vatican archives, scholars have been busily occupied in exploring and publishing their contents and in studying the numerous problems to which exploration and publication have given rise, so that the books and articles which have grown directly or indirectly out of labors at the Vatican represent a very considerable portion of the historical output of the last fifteen years. An enumeration of everything of this nature that has appeared would prove of little interest to the readers of the *BULLETIN* even were the material at hand for a bibliographical task of such magnitude; it has, however, seemed worth while to indicate the principal lines along which research at the Vatican has been active, and, in particular, to give some idea of the work there carried on by organized effort on the part of the various European countries. Some mention of recent publications has been inevitable in dealing with the contents of the archives; repetition of works already cited will, as far as possible, be avoided.¹

The oldest of the institutions engaged in the exploration of the Vatican archives is the *École Française de Rome*, which began as an offshoot from the school at Athens in 1873 and attained a distinct organization in 1875. The school is supported by the French government and is under the direction of the *Académie des Inscriptions et Belles-Lettres*, subject to the control of the minister of instruction. The director, at present the Abbé Duchesne, is chosen for a period of six years. Six members are appointed each year by the minister from among the candidates submitted by the *École Normale Supérieure*, the *École des Chartes*, and the *École des Hautes Études*. The

Fabre, "Note sur les archives du Château Saint-Ange," "Mélanges de l'École française de Rome," 1893, 3-19; Sickel, "Römische Berichte," reprinted from the "Sitzungsberichte" of the Vienna Academy, 1895.

¹I know of no attempt at a complete bibliography of publications from the Vatican archives. The list of Schmitz, already cited, is useful for the registers; many titles are given in the bibliography of the publications between 1885 and 1891 relative to the history of medieval Italy, which appeared as the twelfth number of the "Bulletino dell' Istituto Storico Italiano," Rome, 1892.

In the following account emphasis is laid on the results of the organized and systematic explorations conducted by the various missions and institutes. In addition to the publications of individuals noted under particular countries, certain works which rest largely upon researches in Roman archives deserve special mention. Such are: Pastor, "Geschichte der Päpste seit dem Ausgang des Mittelalters," Freiburg i. B., 1891 ff.; Valois, "La France et le Grand Schisme d'Occident," Paris, 1896; Schottmüller, "Der Untergang des Templer-Ordens," Berlin, 1887; Albanès, "Gallia Christiana Novissima" . . . I. (Province of Aix) Montbéliard, 1895.

appointments are renewable for a second or third year; usually there are also a few associate members. The work of the school includes archæological and philological, as well as historical studies, but research in the archives always occupies the attention of some of the members—notably of those who have profited by the admiral training of the *École des Chartes*. The principal undertaking of the school—the publication of the registers of the Popes of the thirteenth century—was begun as early as 1879, and has not yet been completed; the volumes already issued form the most important series of publications that has been made from the Vatican archives, and reflect great credit upon the school. In recent years the historical investigations of the school have centered about the registers of the Avignonese Popes, where, as complete publication is out of the question, owing to the immense amount of material, they have been confined to the entries relating to French affairs and to the special diplomatic problems involved. One member has also studied the *regesta cameralia* of this period. The resources of the Vatican have also been utilized in many other publications of the French school, notably in Fabre's studies of papal administration and in the important works of Müntz and Faucon upon the history of art.¹

The materials for German history in the Vatican archives are very abundant, and their exploration has been undertaken from many different quarters. Among the first in the field were the representatives of the Munich Historical Commission, who collected and published important acts for the history of the Empire under Louis the Bavarian.² Soon the historical commissions of Württemberg and Baden and the directors of the series of sources published in Westphalia, Mecklenburg,

¹Reports upon the work of the *École Française* appear in the "Compte-rendu des séances de l'Académie des Inscriptions et Belles-lettres." A list of the members since 1873 is printed in the periodical organ of the school, "*Mélanges d'Archéologie et d'Histoire*," XVI. 3-12. Together with the school at Athens, the school at Rome publishes the "*Bibliothèque des Écoles d'Athènes et de Rome*," an octavo series for monographs and a quarto series for the *regesta*, etc., where the more extended contributions of its members appear. An examination of the reports of the nunci in France was planned not long ago, but I am not aware that it has as yet led to definite results.

²Riezler, "*Vatikanische Akten zur deutschen Geschichte in der Zeit Kaiser Ludwigs des Bayern*," Innsbruck, 1891; compare the earlier publications of Reinkens and von Lüher in the same field. The Vatican archives have also been examined for the edition of the acts of the imperial diets, and the commission originally planned to publish the reports of the nunci of the Reformation period as a supplement to this series.

and the province of Saxony had their agents at work in the Vatican, as did also the provincial authorities of Brandenburg, Posen, and East and West Prussia.¹ Documents have also been collected for the ecclesiastical provinces of Cologne, Trier, and Hamburg-Bremen, as well as for a number of dioceses within and without their limits. Such investigations, carried on independently with reference to the history of each state or locality, naturally involve great waste of effort, since the ground must be gone over anew in each case, and the results are sometimes exceedingly meagre. To obviate the difficulty, the two leading German representatives of historical studies in Rome, the Prussian Institute and the Görresgesellschaft, have undertaken, first, to prepare a "Repertorium Germanicum," or calendar of all the entries relating to German affairs in the registers of the later Middle Ages, and second, to publish the reports of the German nuncii of the sixteenth and seventeenth centuries. The work has been so apportioned that the Prussian Institute takes the registers from 1378 to 1448; the Görresgesellschaft, those from 1448 to 1517 and the earlier volumes of Martin V. With reference to the nuncii, the agreement finally reached by the various investigators that had already begun work in this field assigns to Prussia the reports before 1560 and after 1605 as well as those for the period 1572-1585; the Görresgesellschaft has those between 1585 and 1605, while the important years 1560-1572 are reserved for the Austrian Institute.

The Prussian Institute, founded in 1888, is under the general supervision of the Berlin Academy of Sciences, and the immediate control of a commission of three, consisting at present of Professors Wattenbach and Lenz and the director of the Prussian archives, Dr. Koser. In Rome the institute is represented by a secretary, Dr. Friedensburg, two regular

¹Schneider and Kaiser, "Württembergisches aus römischen Archiven," Stuttgart, 1895 ("Württembergische Geschichtsquellen," II. 355-506); Schmidt and Kehr, "Päpstliche Urkunden und Regesten aus den Jahren [1295-1378], die Gebiete der heutigen Provinz Sachsen und deren Umlände betreffend," Halle, 1886-1889 ("Geschichtsquellen der Provinz Sachsen," XXI., XXII.); Finke, "Die Papsturkunden Westfalens bis zum Jahre 1378," I. Münster, 1888 ("Westfälisches Urkundenbuch," V.); Ehrenberg, "Urkunden und Aktenstücke zur Geschichte der in der heutigen Provinz Posen vereinigten ehemals polnischen Landestheile," . . . Leipzig, 1892; Ehrenberg, "Italienische Beiträge zur Geschichte der Provinz Ostpreussen," Königsberg, 1895. Other local researches and publications are mentioned in the "Römische Quartalschrift," VII. 216 ff., 487, and in the "Deutsche Zeitschrift für Geschichtswissenschaft," VIII. 176.

assistants, and a varying number of other workers; the expenses of publication are borne jointly by the Prussian archives and the ministry of education. Thus far eight volumes of the reports of the nuncii have appeared;¹ work for the "*Repertorium Germanicum*," which receives a special subsidy from the emperor's private funds, has been carried on in the registers of Eugene IV., and the first volume has been published.

The historical section of the Görresgesellschaft, instituted "for the encouragement of the sciences in Catholic Germany," has its regular representatives at Rome, under the direction of Dr. Ehses, and is one of the most active agencies in the scientific utilization of the Vatican archives. Besides two volumes of reports of German nuncii, the society has published an important body of documents relating to the divorce of Henry VIII. of England, and has begun a series of valuable contributions to the history of papal finance.² Work has also been carried on in the registers of Martin V. and Hadrian VI., and a complete edition of the acts of the Council of Trent is in preparation, and is to be accompanied by the various private diaries and minutes of the council's proceedings. Studies from Rome also appear in the society's review, the "*Historisches Jahrbuch*."

The researches of Austrian scholars in the papal archives, begun in accordance with the imperial decree in 1881, have been conducted almost entirely under the auspices of the Austrian Institute of Historical Studies directed by Theodor

¹ "Nuntiaturberichte aus Deutschland nebst ergänzenden Aktenstücken," Gotha and Berlin, 1892 ff. First period, edited by Friedensburg: I. "Nuntiaturen des Vergerio, 1533-1538"; II. "Nuntiatur des Morone, 1536-1538"; III. and IV. "Legation Aleanders, 1538-1539." Third period, edited by Hansen and Schellhass: I. "Der Kampf um Köln, 1576-1584"; II. "Der Reichstag zu Regensburg, Der Pacificationstag zu Köln, Der Reichstag zu Augsburg" (1576-1582); III. "Die süddeutsche Nuntiatur des Grafen Bartholomäus von Portia," 1573-1574. Fourth period, edited by Kiewnig: I. "Nuntiatur des Paleotto," 1628; a second volume in press.

Reports on the work of the institute appear in the "Sitzungsberichte" of the Academy; see also Sybel's preface to the first volume of the "Nuntiaturberichte" (first period).

² "Quellen und Forschungen aus dem Gebiete der Geschichte. In Verbindung mit ihrem Historischen Institut in Rom herausgegeben von der Görresgesellschaft." Paderborn, 1892, ff. I. 1, Dittrich, "Nuntiaturberichte Giovanni Morones vom deutschen Königshofe, 1539-1540." II. Ehses, "Römische Dokumente zur Geschichte der Ehescheidung Heinrichs VIII. von England, 1527-1534." III. Kirsch, "Die päpstlichen Kollektorien in Deutschland während des XIV. Jahrhunderts." IV. Ehses and Meister, "Die kölnische Nuntiatur, 1583-1587." Compare also the various contributions from Roman archives in the "Festschrift zum elfhundertjährigen Jubiläum des deutschen Campo Santo in Rom," edited by Ehses, Freiburg i. B., 1897. (Inventories of the *collectoriae* and the *introitus et exitus* have been prepared and are to be published. The last report of the work of the society in Rome will be found in the "Historisches Jahrbuch," XVII. 224-236.)

von Sickel. The institute, whose present organization dates from 1890, is supported by the Austrian government; its regular members, who receive an annual stipend, are appointed each year by the minister of education on the recommendation of the director in Rome and the director of the Institut für österreichische Geschichtsforschung in Vienna.¹ In the choice of subjects for investigation members of the institute enjoy considerable freedom, while at the same time emphasis is laid upon the careful and thorough methods which characterize the Austrian school of diplomatics. Of their publications the greater number relate to German history in the century following the interregnum and to the organization and procedure of the papal chancery.² Mention should also be made of the important studies of the director in regard to the documents of the German emperors,³ the monographs of Wahrmund on modern papal elections,⁴ and the numerous contributions of Starzer to Austrian local history. The institute has pushed forward its preparations for the publication of the reports of the German nuncii in the period of the Council of Trent, and the first volume of the series is promised immediately.

Active investigations at Rome have also been carried on by other parts of the Austrian Empire. For Hungary the fine series of the "*Monumenta Vaticana Hungariæ*," edited by Mon-

¹"Statut für das Istituto Austriaco di Studi Storici," Vienna, 1893; director's reports in "Mittheilungen des Instituts," VI. 203-223; XIII. 367-376, 663-667. The publications of the institute down to the close of 1893 are described by Starzer in the "Oesterreichisches Literaturblatt," II. Nos. 21-24.

²On the history of the empire: Fanta, Kaltenbrunner, and Ottenthal, "Actenstücke zur Geschichte des deutschen Reiches unter den Königen Rudolf I. und Albrecht I.," Vienna, 1889 (Vol. I. of the "Mittheilungen aus dem vatikanischen Archive," published by the Vienna Academy); Starzer and Redlich, "Eine Wiener Briefsammlung zur Geschichte des deutschen Reiches und der österreichischen Länder in der zweiten Hälfte des XIII. Jahrhunderts" (Vol. II. of the same collection); Werunsky, "Auszüge aus den Registern der Päpste Clemens VI. und Innocent VI. zur Geschichte des Kaiserreichs unter Karl IV.," Innsbruck, 1885; id., "Geschichte Kaiser Karls IV. und seiner Zeit," Innsbruck, 1880-1892.

On the chancery: Sickel, "Liber Diurnus Romanorum pontificum," Vienna, 1889; Tangl, "Die päpstlichen Kanzleiordnungen von 1200-1500," Innsbruck, 1894; Ottenthal, "Die päpstlichen Kanzleiregeln von Johannes XXII. bis Nicolaus V.," Innsbruck, 1888; Kaltenbrunner, "Römische Studien," Innsbruck, 1884-1886; and numerous briefer studies of the same authors in the "Mittheilungen des Instituts."

³Sickel, "Das Privilegium Otto's I. für die römische Kirche vom Jahre 962," Innsbruck, 1883; Sickel and Bresslau, "Die kaiserliche Abfertigung des Wormser Concordats," "Mittheilungen des Instituts," VI. 105-139; and Italian documents contributed to the "Studi e Documenti di Storia e Diritto," VI., and to the "Notizie e Trascrizioni dei Diplomi imperiali e reali delle Cancellerie d'Italia," 1892.

⁴"Das Ausschliessungsrecht der katholischen Staaten . . . bei den Papstwahlen," Vienna, 1888; "Beiträge zur Geschichte des Exclusionsrechts bei den römischen Papstwahlen," Vienna, 1890; also in the "Historisches Jahrbuch," XII. 784-791, and the "Archiv für katholisches Kirchenrecht," LXVII., LXVIII., LXXII.

signor Fraknói and published under the auspices of the higher clergy of the kingdom, well illustrates the resources of the various sections of the Vatican archives and forms a contribution of the highest importance to Hungarian history.¹ Bohemia has been represented in Rome since 1887 by two *Landesstipendisten*, who receive a regular subvention from the diet and are ranked as extraordinary members of the Austrian Institute. They have been engaged in a careful examination of the papal registers with reference to Bohemian ecclesiastical history and have also collected important material for the history of the Counter-reformation in Bohemia.² In the South Slavonic lands the Academy of Sciences at Agram has directed explorations at the Vatican; the documents published come chiefly from the Propaganda and relate to Bulgarian affairs.³

Researches in regard to the material for Polish history in the Vatican archives were begun in 1885 at the instance of members of the aristocracy and higher clergy of Austrian Poland. Since 1886 the work has been directed by Professor Smolka of the University of Cracow, under the auspices of the Cracow Academy of Sciences and with the aid of subsidies furnished by the Galician diet and the Austrian minister of education. More than forty volumes of copies, analyses, and inventories of documents relating to the history of Poland have been sent to Cracow for preservation in the library of the Academy, which has published a summary of their contents and some of the material which they contain for the history of the sixteenth century.⁴ Important pieces for the history of

¹"Monumenta Vaticana Historiam regni Hungariæ illustrantia," Budapest, 1884-1891. First Series: I. "Rationes Collectorum pontificiorum in Hungaria, 1281-1375"; II. "Acta legationis Cardinalis Gentilis, 1307-1311"; III, IV. "Bullæ Bonifacii IX."; V. "Liber Confraternitatis Sancti Spiritus de Urbe, 1440-1523"; VI. contains the correspondence of Matthias Corvinus with the Popes. Second Series: I. "Relationes Oratorum pontificiorum, 1524-1526"; II. "Relationes Cardinalis Buonvisi, 1686."

²Compare "Mittheilungen des Instituts," XIII. 376. Dudik's volume on Moravia, "Auszüge für Mährens allgemeine Geschichte aus den Regesten der Päpste Benedict XII. und Clemens VI." (Brünn, 1885), I have not seen.

³Fermendzin, "Acta Bulgaricæ ecclesiasticæ," Agram, 1888, forming Vol. XVIII. of the "Monumenta spectantia Historiam Slavorum Meridionalium."

⁴Korzeniowski, "Catalogus Actorum et Documentorum res gestas Poloniæ illustrantium quæ . . . expeditionis Romanæ cura 1886-1888 deprompta sunt," Cracow, 1889; id., "Excerpta ex libris manuscriptis Archivi Consistorialis Romani, 1409-1590," Cracow, 1890. These have since been combined with other matter to form "Analecta Romana quæ historiam Poloniæ sæc. XVI. illustrent (Scriptores Rerum Polonicarum, XV.)," Cracow, 1894. References to publications in Polish are given in the introduction. See also Lewicki, "Codex Epistolaris sæculi decimi quinti," Cracow, 1891-1894. Reports on the work of the mission in Rome appear in the "Anzeiger" of the Cracow Academy.

Prussian Poland have been collected in Rome under the direction of the provincial authorities of East Prussia and Posen, while from the Russian side noteworthy studies have been made by Professor Wierzbowski of the University of Warsaw.¹

The investigations conducted on the part of the other nations of Europe can be described more briefly. The English Public Record Office has for several years had an agent in Rome preparing a "calendar of all entries in the Papal Regesta of the Middle Ages which illustrate the history of Great Britain and Ireland;" three volumes have appeared,² covering the period from 1198 to 1419. Norway, Sweden, and Denmark have each a representative in the Vatican archives, and by a coöperative exploration of all the material relating to Scandinavia avoid the waste of time inseparable from a separate examination for each country. Materials for Swiss history have been gathered both from the registers and from the reports of the nuncii, at the instance, in the one case, of the historical society in Basel, and, in the other, of the *Allgemeine Geschichtsforschende Gesellschaft*.³ The Belgian government has twice sent Professor Cauchie of the University of Louvain upon a mission to Italian archives; at Rome he has explored various parts of the registers, of the records of the Camera, and of the reports of the Flemish nuncii.⁴ I know of no publications for Holland except the collection of bulls concerning the diocese of Utrecht, edited by Brom.⁵ With reference to the materials for Spanish history preserved at the Vatican a preliminary examination has been made, under official direction, by Ricardo de Hinojosa, who has published some

¹Wierzbowski, "Vincent Laureo, nonce apostolique en Pologne," Warsaw, 1887; "Uchans-clana," Warsaw, 1884-1895.

²Bliss "Papal Letters," London, 1893-1895; "Petitions to the Pope," London, 1897. A brief note on the materials at the Vatican concerning English history appeared in the "English Historical Review," 1889, 810, where it is stated that the English agent is instructed to carry his investigations to 1688.

³Bernouilli, "Acta pontificum Helvetica," I. 1198-1208, Basel, 1891. Wirz, "Akten über die diplomatischen Beziehungen der römischen Curie zu der Schweiz, 1512-1552" ("Quellen zur Schweizer Geschichte," XVI.), Basel, 1895.

⁴See his "Mission aux Archives vaticanes," "Compte-rendu des séances de la Commission royale d'histoire de Belgique," 1892, 185-192, 313-483; and compare the reports of the commission for 1894, 3, 195, and for 1895, 250. The Abbé Cauchie's recent brochure, "De la création d'une École belge à Rome" (Tournai, 1896) did not reach me until after the first appearance of the present article. The author accompanies his plea for the establishment of a Belgian school at Rome with a convenient summary of the contents of the archives (with special reference to Belgian history) and of the work of the various existing schools.

⁵"Bullarium Trajectense," . . . The Hague, 1891 ff.

of the results in a volume on the despatches of the Spanish nuncios.¹ Nothing similar has yet been done for Portugal. The papal archives naturally contain less for the history of Russia than for that of Catholic Europe; the amount of material is, however, by no means inconsiderable, as is shown by the various writings of Pierling on the relations of Russia to the Holy See,² and by the report of his investigations at Rome recently published by Professor Smourlo of the University of Dorpat.³ The Russian government has recently determined to establish an institute at Rome, part of whose time shall be given to historical studies.

Within the Vatican itself the officials have naturally had small leisure to devote to special research, yet the scholars connected with the papal court have not left entirely to outsiders the work of utilizing the archives. We owe to them, and others working under their direction, the publication of three important sets of registers and a considerable amount of scattered material, relating particularly to Italian history,⁴ while mention should also be made of the publications of Pitra and Palmieri on the registers, and of the documents bearing on the German Reformation, brought together by the former archivist Balan.⁵ Material from the archives appears from time to time in the *Studi e Documenti di Storia e Diritto* and in other publications of the Accademia Romana di Conferenze Storico-giuridiche, founded and maintained under papal sanction. At present the most active investigators who hold official positions at the Vatican are Father Denifle, custodian of the archives, and Father Ehrle, prefect of the library, both widely known for their valuable contributions to the ecclesiastical, literary,

¹"Los Despachos de la Diplomacia pontificia en España. Memoria de una Misión oficial en el Archivo Secreto de la Santa Sede," I., Madrid, 1896.

²"Documents inédits sur les rapports du Saint-Siège avec les Slaves," Paris, 1887; *Papies et Tsars (1547-1567) d'après des documents nouveaux*, 1890; "La Russie et le Saint-Siège," 1896.

³See "Revue Internationale des Archives," etc., series "Archives," I. 135. For Livonia see Hildebrand, "Livonica, vornehmlich aus dem 13. Jahrhundert im vatikanischen Archiv," Riga, 1887.

⁴Registers of Honorius III., Clement V., and Leo X., cited above. "Spicilegio Vaticano di Documenti inediti e rari estratti degli Archivi e dalla Biblioteca della Sede Apostolica," Rome, 1890-1891. "Il Muratori," Rome, 1892.

⁵Pitra, "Analecta novissima Spicilegii Solesmensis, altera continuatio," I., Paris, 1885. Balan, "Monumenta Reformationis Lutherianæ ex tabulariis secretoribus S. Sedis, 1521-1525," Batisbon, New York, and Cincinnati, 1884; and "Monumenta sæculi XVI. Historiam illustrantia," Innsbruck, 1885.

and educational history of the Middle Ages, in connection with which they have drawn freely upon the resources of the papal collections.¹

Of researches at the Vatican with reference to American history there is unfortunately very little to record. Some years ago a Peruvian Jesuit, Father Hernaez, had access to the archives and made some use of them for his collection of documents relating to American ecclesiastical history.² Visitors to the Chicago Exposition will perhaps remember the handsome set of phototype facsimiles from the papal archives which was exhibited in the Convent of La Rabida among the objects relating to the discovery of America. This volume, of which but twenty-five copies were published, *ut illustrioribus tantum bibliothecis distribuarentur*, contains facsimiles and transcriptions of twenty-three letters from the papal registers, relating to the bishopric of Gardá in Greenland,—the first American see,³—the demarcation line between the Spanish and Portuguese colonies, and the sending out of the first missionaries and bishops after the voyages of Columbus.⁴ As most of these documents were previously known, their publication was of more importance for purposes of exhibition than as an addition to historical knowledge; it will prove of

¹See particularly Ehrle, "Historia Bibliothecae Romanorum pontificum tum Bonifatianae tum Avenionensis," I., Rome, 1890; and Denifle, "Die Universitäten des Mittelalters," Berlin, 1885, and "Chartularium Universitatis Parisiensis," Paris, 1889-1894, and the various volumes of their joint publication, "Archiv für Literatur- und Kirchengeschichte des Mittelalters."

²"Coleccion de Bulas, Breves y otros Documentos relativos á la Iglesia de America y Filipinas, dispuesta, anotada e ilustrada por el Padre Francisco Javier Hernaez, de la Compañía de Jesus." Brussels, 1879. The work, which was brought out by Fathers Garrastazu and de Uriarte after the author's death and does not seem to be widely known, was undertaken at the instance of the Second Council of Quito. A large part of its contents was drawn from the various Bullaria, with some use of South American archives.

³In regard to which several pieces have been published by a Dalmatian scholar, Jelie, under the title "L'évangélisation de l'Amérique avant Christophe Colomb," "Compte-rendu du Congrès scientifique international des Catholiques tenu à Paris, du 1er au 6 avril, 1891," fifth section, 170-184; "Compte-rendu du troisième Congrès . . . tenu à Bruxelles" . . . 1894, fifth section, 391-395.

⁴Also a letter of Julius II. commending Bartholomew and Diego Columbus to Ferdinand. The volume bears the title: "Documenta selecta e Tabulario secreto Vaticano, quae Romanorum pontificum erga Americae populos curam ac studia tum ante tum paullo post insulas a Christophoro Colombo repertas testantur, phototypis descripta," Rome, 1893. Compare Ehrle, "Der historische Gehalt der päpstlichen Abtheilung auf der Weltausstellung von Chicago," "Stimmen aus Maria-Laach," XLVI. 337-394. The documents relating to the bishopric of Gardá are reprinted in the BULLETIN for October, 1896, pp. 502 ff. On the establishment of bishoprics in America see also Ehses, "Aus den Consistorialakten der Jahre, 1530-1534," "Römische Quartalschrift," VI. 220-236. I am told that some researches have been made for the history of certain North American dioceses, but have no exact information on this point.

further value if it serve to stimulate among us an interest in the archives and a desire to explore them.

The value and extent of the Roman sources for American history would appear only after a prolonged examination. Unquestionably, the general history of the western world, even of those parts which have always been predominantly Catholic, stands in no such close relation to the papal system as does the history of Europe, and it were vain to expect the same assistance from Roman archives in the one field as in the other. Nevertheless, there is every reason to believe that the Vatican collections contain much of special interest to American students, particularly in regard to the age of exploration and colonization, and the history of Latin America,—in which direction the material is doubtless most abundant, while our opportunity is at the same time the wider, owing to the backwardness of Spain and Portugal in undertaking researches at the Vatican. A systematic and thorough investigation of the American material at the Vatican ought certainly to be made,—either by a specially qualified agent or, better still, by an American School of Historical Studies at Rome. It is not the place here to insist upon the utility of such a school, established upon the general plan of the classical schools at Rome and Athens, and working in friendly coöperation with them and with the historical institutes already founded by European countries. If it were properly organized and directed, I believe a school at Rome would prove of the greatest value, not only by its actual contributions to historical knowledge, but also by its stimulating effect upon the serious study of history among us. Its activities should not be confined to American subjects, but should also include some of the numerous other problems of general interest whose solution lies in the archives and libraries of Rome and other parts of Italy, so that the idea of such an institution ought to appeal to all who are concerned in the progress of historical science in America, regardless of the directions in which their own special studies may lie.

CHARLES H. HASKINS.

THE MEDIAEVAL TEACHER.¹

The Younger Pliny tells us that only an artist may criticise the works of art, but all mankind may pass judgment on the lives of men who are friends of humanity. Such lives, however short, never melt into the general void, but shed forever a sweet aroma within the circle of their rememberers. And when such lives are prolonged beyond the patriarchal limit they serve as beacon lights, as finger posts, to all who must travel the same pathway in the future.

As I listened to the eloquent gentlemen who have preceded me, and noted the gains which the cause of popular education has made within the present century, my mind, somehow, reverted to a not dissimilar situation in the remote past, to the very dawn of our modern civilization. Then, as at the opening of this century, a world lay before the restorers of civilization; then a mass of civil and religious ruin was added to the obstacles of nature; then the usual difficulties of state building were increased by the immensity of the débris and the utter rawness of the material for the foundation work. The pioneers of education in the United States found at hand Christian character, doctrines, discipline of life, knowledge of good and evil, virtue and vice, an educated sense of justice and a respect of law, ancient and familiar models to imitate, and unity of race and language. But the pioneers of education in Europe found none of these,—they were as men who go out upon a dark and pathless sea without chart or compass or light.

Then, again, it struck me that if ever the law of continuity be true of institutions in particular, it is especially so in the history of education, so that whatever institution has been enabled to reach the present, and to flourish with promise of future growth, must have its roots in its own remote past, and must keep in touch with the long-tried laws of its life history, if it would hope for permanent efficacy. The present is ever the

¹ Discourse delivered at Hartford, Conn., January 25th, on the occasion of the celebration of the 86th anniversary of the birth of Dr. Henry Barnard, one of the founders of the common school system of the United States.

child of the past, in human institutions as in human conduct. It may not therefore be amiss to go back a few moments to the days when those European ancestors from whom we are all descended were laying the beams of state and church, when they were emerging from their forests and their marks, to take up the municipal life of the Roman provincials, and to transform the essential paganism of the Roman state into a system of politico-social life imbued with the pure and vital spirit of Christianity. Perhaps, too, in celebrating the history of a century of education it is not out of place that a Catholic priest should say something of the incomparable educational merits of that institution which has seen the rise and fall of so many systems of education, and which alone on earth today can bear trustworthy personal witness to the history of human hopes and ideals for nigh two thousand years.

The Christian teacher of the Middle Ages! It is Boethius and Cassiodorius in Italy, men who collect with reverence the elements of classic science and the principles of human wisdom, to hand them down to a time of wider peace and more varied opportunities,—Roman men of the best classic type, from that Italy in which the lamp of scholarship never went utterly out, and in which the system of schools was never quite suspended. It is Isidore of Seville in Spain, the great Bede and Alcuin in England, Colchu and Dicuil in Ireland. Their knowledge was what we now call encyclopædic, and such too was their method. They affected the manual and the cultivation of the memory,—but we must remember that they were dealing with races young in culture, physically vigorous, and strongly attracted to a manifold external activity; also that they lived in an iron age of change and war, and that no mean of political stability had yet been reached around them.

So they opened their little schools, sometimes in the palace of king or count, oftener in the cathedral close or the cloister of the abbey. Municipal life and civil architecture were yet in embryo,—peace, and books, and rewards, and a logical career, were as yet furnished by the Church alone. Often, too, they were clerics, and they taught on feasts and holidays a divine learning, the complement and sanction of their rudiments of human science. On such occasions they had for

scholars, the rude lords of the soil, and the slow tillers thereof, coarse men-at-arms, who were charmed with the teacher's high views of history and human society, his varied learning and his skill in speech.

Such a teacher knew Latin well, and sometimes Greek. He was skilled in the church-song. And so he trained the little choristers and the youthful clerics in the history and literature of the world's mightiest state, and he fitted them to hold the highest offices in the powerful ecclesiastical society that enclosed and protected on all sides the growing body of mediæval states. His students were legion, for progress and culture were then synonymous with the churches and monasteries that were springing up in every Christian state of Europe. He taught arithmetic and geometry, which latter included the elements of mechanics and architecture, sculpture and painting. Astronomy, too, was to be had in his school, and all such mathematical knowledge as was needed for ecclesiastical purposes. The study of grammar meant a liberal education in the classic texts used, for by grammar was meant an all-sided interpretation of them. With it went the study of music, no small element in the gradual softening of domestic manners, and the development of mediæval art. Dialectic, or the art of correct thought, and rhetoric, or that of ornate and persuasive speech for the public good, were favorite studies,—indeed, all these branches made up the seven liberal arts, or the perfect cycle of education as the Middle Ages understood it, and loved to symbolize it in its miniaturesd manuscripts, on the sculptured portals of its cathedrals, or the carved bases of its pulpits.

The inseparable text-book of the mediæval teacher was Vergil, and his majestic Latin the highest scientific ideal. Yet by the devotion to Vergil he prepared the ground for the blossoming of the vernacular tongues, whose first great masters had learned from the Latin classics the adorable art of correct and pleasing speech. What a distance between the jabbering barbarians whom St. Gall met at Constanx and the author of the Nibelungen Lied or the Chanson de Roland! In the five or six centuries of classic formation that intervenes, somebody has taught these men the highest architeconic of

literature. It was the mediæval teacher with his Vergil and his Bible, his child-like faith and his true artistic sense. If we could doubt it, the witness of Dante would be there to convince us, for to that crowning glory of mediæval teaching Vergil is ever the 'Maestro e Duca,' the 'dolce pedagogo' from whom he has taken

'lo bello stile che m'ha fatto onore.'

Civil society was also the debtor of such a teacher. It was he who preserved the text and the intelligence of the Civil Law of Rome, as confirmed in the Code of Justinian, and he helped to amalgamate with it the rude customs and precedents of the wandering tribes that had squatted on the imperial soil. He taught the fingers of Frank and Gothic soldiers how to form letters, and he taught their children how to draw up the necessary formulæ for the conduct of public and private interests,—charters, laws, wills, contracts, privileges, and the like.

Nor was he ashamed to handle the implements of the fine arts, like a St. Eloi and a Bernward of Hildesheim, and to fashion countless objects that translated into material form the ideal beauty which haunts forever, though forever unattained, the heart of man. Even the domestic arts—agriculture, fishery, road and canal-making, irrigation,—all the humble arts that bring men closer together, and develop the social instinct, and enable men to dominate the pitiless grinding forces of nature, were taught the people by these men, as endless references in the mediæval annals show, from the Orkneys to the Black Sea.

It is the glory of the Old Church that these teachers were her priests and her monks, and that in every land she cherished them by her councils and by her endowments. If she had nothing else to be proud of, that would be much indeed. It was said of Melancthon, and before him of good old Jacob Wimpheling, that he was "Praeceptor Germaniae." It might be said with greater truth and wider application that the Old Church was "Praeceptor totius Occidentis," the universal teacher of Europe from the Vistula to the Scheld, from Otranto to Drontheim.

One might imagine that in those troublous times such men would be pardoned had they paid little attention to the phi-

losophy of education, to methodology, and to general pedagogics. But the truth is far otherwise. We have in every century a number of pedagogical treatises of a general or specific character, on schools and teachings in general, on the formation of the nobles or the ecclesiastics, all of which breathe the most sincere devotion to the teacher's vocation. Alcuin, Hrabanus Maurus, Sedulius of Liège, are but a few of these writers, and in the thirteenth century there is an entire galaxy of writers on pedagogics, whose treatises are far from despicable and are indeed worthy of veneration when we recall the extent of their actual influence. On the eve of the Reformation appear the admirable treatises of Silvio Antoniano and Johannes Dominici, two cardinals, of Maphæus Vegius, Aeneas Sylvius (Pius II.) Erasmus and Vivès, while the teaching and the system of the Brothers of the Common Schools in the Netherlands and along the Rhine are the admiration of all the historians of that time. At the same time the secondary education throughout northern Europe, notably in England and Scotland, had reached a high degree of development quite independent of the movement of the Renaissance. But here we are at the end of the Middle Ages; the vocation of its teachers, though not gone has changed; the whole theory of education is about to pass over into other hands, and to be informed by a new spirit, born of the circumstances and needs that followed the great religious upheaval and the shattering of the Catholic unity.

Still for a thousand years the mediæval teachers had worked at the formation of the men and women of Europe. And if in any art, one may turn with pride to the masterpieces as proofs of the skill and the training of the artist, we may do so in a special manner in the art which Gregory the Great called the art of arts,—the government of souls. Great ecclesiastics and prudent statesmen, saints and bishops and popes, princes and kings of high repute, came out of their schools, as well as a brave and patient people, artistically endowed, lovers of poetry and art, and all the higher graces of the mind, dowered, with strong faith, and accustomed to bear the crowding ills of this life by the contemplation of a better one. Names rush to one's lips, but I forbear to recite them,—I will only say that we cannot afford to forget or neglect any system

of study by which the world was enriched with such philosophers and theologians as St. Thomas and Duns Scotus, such historians as Otto of Freising and Froissart, such poets as Dante and Chaucer, such architects as Arnulf of Cambrai and Brunelleschi, such statesmen as Suger and St. Louis. It is on such names, no less than on the fabric of Church and State strengthened and developed by them that the imperishable reputation of the Mediæval Teachers may be allowed to rest.

THOMAS J. SHAHAN.

ANALECTA.

The Neo-Maurines of Maredsous.

Among the ecclesiastical corporations that fell victims to the Culturkampf was the young and flourishing community of Benedictines, founded by Dom Maurus Wolter and his brother Placidus, at Beuron in Sigmaringen. Though under the protection of the Catholic branch of the Hohenzollerns, its members were expelled from Prussia. Some sought a refuge at Seckau in Tyrol, while others belonging to distinguished families of Belgium turned to the province of Namur, where they found a home among the hills that border the course of the Meuse. A great abbey with a splendid church, the creation of the famous architect, Jean Béthune, soon arose; vocations increased; the love of labor and the spirit of study kept pace with the growth of religious fervor. A number of the monks opened a college or abbey-school that soon took rank among the highest and best educational institutions in Belgium. Others turned their attention to the advancement of ecclesiastical studies, notably along the lines of historical and literary research. Abbot Placidus and the deeply-regretted liturgist Dom Suitbert Baeumer were the leaders of this chosen land. With them were associated Dom Bonifacius Wolff, a skilled patristic scholar, actually prior of Cesena, and Dom Laurentius Jansen, philosopher and theologian, littérateur and artist, now rector of the College of St. Anselm at Rome, and professor of dogma in the same. Among the younger members of this learned society were Dom Ursmer Beurlière and Dom Germanus Morin. It is to the studies of the latter two that this brief notice is consecrated.

Dom Ursmer Beurlière has devoted his attention chiefly to the ecclesiastical history of Belgium. It is to him that we owe the publication of the "*Monasticon Belge*", in which he has undertaken the task of correcting and completing the great in-folios of the "*Gallia Christiana*" as far as the churches and

abbeys of Belgium are concerned.¹ In addition he is publishing a series of "Unedited Documents" calculated to throw light on the church history of Belgium.²

Dom Germanus Morin has devoted his time to patristic studies. For ten years or more he has been busy with an edition of the works of St. Cæsarius of Arles, and though his task is yet unfinished, he has found occasion to bring before the learned public several important discoveries made in the libraries of Belgium, France, Germany, England and Italy. These researches he publishes under the title of "*Anecdota Maredsolana*." The first volume published was a very old liturgical text of the church of Toledo.³ The second excited great interest, for it brought out a rare treasure, a very old Latin version of the Epistle of St. Clement of Rome to the Corinthians.⁴ Until the discovery of this text it was supposed by many that the Latin Middle Ages were ignorant of the genuine Epistle of St. Clement. The third and last volume contains a hitherto unknown work of St. Jerome.⁵ The world of savants has welcomed their writings with great warmth, and Leo XIII. has lately written a congratulatory letter to the hard-working and sagacious critic. In addition to literary undertakings of so grave a character, the Benedictines of Maredsous publish monthly the "*Revue Bénédictine*," in which there appear from the pens of several of the younger members conscientious and admired studies on liturgy, patristics, history, criticism, theology and asceticism.⁶ Maredsous is, indeed, a site on which the religious life flourishes, and

¹Monasticon Belge, par le R. P. Dom Ursmer Beurlière, Bénédictin de l'Abbaye de Maredsous, Tome I, première livraison, Province de Namur. Bruges, Desclée, De Brouwer et Cie 1890; 4°, pp. 152.

²Documents Inédits pour servir à l'histoire ecclésiastique de la Belgique publiés par le R. P. Dom Ursmer Beurlière Bénédictin de l'abbaye de Maredsous, Tome premier. Maredsous, 1894; 8°, pp. 324.

³Anecdota Maredsolana, vol. I., Liber Comicus sive Lectionarius Missae quo Toletana Ecclesia ante annos mille et ducentos utebatur edidit D. Germanus Morin presbyter et monachus Ordinis S. Benedicti e congregatione Beuronensi. Maredsoli in Monasterio S. Benedicti 1893; 8°, pp. 462.

⁴Anecdota Maredsolana, vol. II. Sancti Clementis Romani ad Corinthios Epistolae versio latina antiquissima, edidit D. Germanus Morin presbyter et monachus Ord. Benedicti, 1894; 8°, pp. 75.

⁵Anecdota Maredsalana, vol. III., pars I. Sancti Hieronymi Presbyteri qui deperdit, hactenus putabantur commentarioli in psalmos, edidit, commentariis instruxit, prolegomena et indices adiecit, D. Germanus Morin, presbyter et monachus Ord. S. Benedicti, Maredsolensis, 1895; 8°, pp. 114.

⁶Revue Bénédictine, Maredsous, 13 vols., 1883-1896.

where the best traditions of monastic studies have been again revived with honor. It need not therefore surprise us that Leo XIII. applied to this brotherhood for a man to whom he might entrust the government of the new Bénédictine College of St. Anselm, that when he desired to bind the various corporations of the great Benedictine Order in a solid federation he applied to Maredsous, and received from there Dom Hildebrand de Hemptine, who was made Abbot Primate of the Order under the new constitution, or that his attempt to plant in Brazil the family of St. Benedict was entrusted to a monk of Maredsous, Dom Gerard van Caloen, who governs the monastic colony of Olinda.

We rejoice to see the ancient Order of St. Benedict putting forth such fruits of gladness and utility. The world is its debtor as it never has been to any other society of men. But above all the world of letters owes it incalculable gratitude, since in a long night of war and transition and ignorance it kept trimmed the lamp of mental culture and preserved the best traditions of the ancients, while it healed the ills of a rude imperfect society and kept alive the useful and domestic arts. We rejoice that the traditions of the Maurine editors of the Fathers are flourishing anew, and we follow with deep interest the development of a school that promises to prepare for us new Mabillons and Montfaucons, new Martènes, Ruinarts and D'Achéry's, in other words to lift again the ecclesiastical sciences to the brilliant plane they occupied in the life of the seventeenth century.

BOOK REVIEWS.

Sacred Scripture.

The Life and Times of Jesus the Messias. By Alfred Edersheim, in 2 vols., new American edition. New York: E. R. Herrick & Co.

Although this publication is by no means a recent one, and has already been reviewed in several periodicals, yet the appearance of a new American edition may not be an unsuitable occasion for a few words of criticism.

The author is a divine of the Church of England and a convert from the Jewish faith. As a Christian he writes of his sublime subject with strong and touching faith. The prejudices, however, of Protestant theology show forth here and there throughout the work and mar its correctness. We do not, however, lay great stress on this point, since the author's obsolete errors are not of his own invention, and are easily detected by that class of Catholic readers into whose hands this book is likely to fall.

As a Jewish convert, Dr. Edersheim treats his matter in a masterly fashion; and his method is wholly different from that of previous writers on the Life of Christ. No Life of Christ can be exactly a biography of our Lord; for, as our author well remarks, "to take the lowest view of it, the materials for it do not exist." Most books bearing that title not only contain what we may know of the Life of Christ from the Gospel narrative, but are swelled to large proportions by poetical, philosophical, theological and mystical discussions of the various aspects of the life of the God-man. Such works derive their special value and importance from the piety or erudition of the writer. Dr. Edersheim departs entirely from this plan. Most of the information which his work contains is borrowed from Jewish antiquities with which he is evidently much more familiar than any of his predecessors. It appeared to him that this method of his, when followed out properly, would best illustrate the Gospel narrative, for it shows us the real social phases of Christ's life. It teaches us the Jewish habits

of thought, speech, and action, which must form not only the frame in which the picture of our Lord is set, but also the background on which the scenes of His life are cast. This method, moreover, well vindicates the Gospel narrative, since it represents Jesus as a Jew speaking to Jews. Yet He speaks not as one of them, not even as their best and most learned teachers would have spoken. Given, therefore, this profound divergence of spirit compatible enough with similarity of form, the all-important question arises: "Whence did the Teacher of Nazareth, or, shall we say, the humble child of the carpenter-home, in a far-off village of Galilee, draw His inspiration?" That such a method does not lack dangers is evident to anyone who remembers that most of the rabbinical works were written at a much later period than our Lord's lifetime. The author seems to have borne this well in mind, for, unlike many of his predecessors less conversant with Jewish tradition, he has not fallen into any flagrant anachronisms. Although Dr. Edersheim has made such a generous use of rabbinical literature, he has not neglected the many learned productions of Christian writers. On the margins of the pages are found references to nearly every work of note which the diligent student of the Life of Christ may care to read. After all, though we may admire the skill and respect the motives of the numberless authors of modern Lives of Christ, it remains true that the secrets of that admirable existence are yet, and always will be, in the keeping of the society He founded and to which He committed with His teachings the care and solicitude for His divine person, and the proper intelligence of His acts and their motives.

Answer to Difficulties of the Bible, by Rev. John Thein, Priest of the Cleveland Diocese, Author of *Christian Anthropology*. B. Herder, St. Louis, 1897; 8° pp. 628. By mail, \$1.95.

From the more special works of Jaugey, Vigouroux, Meignan and others, Fr. Thein has compiled a useful apologetic volume in defense of the Old and New Testament. Such writings are always in order, because of the perpetual novelty of the objections urged against the Word of God,—a novelty after all that is only seeming, since many of these same objections

are as old as the days of Celsus and Porphyry. The works of Veith and of P. Franco have yet much value, but every nation, every language, requires a special treatment of such matters in keeping with its own temper and genius. We rejoice to see so solid a volume from the pen of a diocesan priest, who rightly calls attention to the "pressure of various pastoral duties" as an excuse for some possible shortcomings. There are several errors of punctuation; the proof-reader has often been found napping; the style is occasionally too familiar and colloquial,—but the deficiencies need not blind us to the merits of a book that is evidently meant more for popular use than for the instruction of advanced students of scripture.

Theology.

"His Divine Majesty," or The Living God. By William Humphrey, S. J. London: Thomas Baker, 1897. Price, 6-6.

This is a volume of some 440 pages on the existence, nature and attributes of God. The author states in the preface that this work is nothing else than a transcription of the notes taken in class from the two well-known professors of the Gregorian university at Rome, Franzelin and Palmieri. He hopes that the writings of his old masters in an English dress may serve to declare that Divine Being whom it has latterly become fashionable to look upon as the great Unknowable. The actuality of the topics discussed, the extensive literature circulated at present concerning the ultimate problems of science and philosophy, the crude idea of God's identity with the forces and matter of the universe, intensify the natural interest in any work which essays to throw light on the greatest of all subjects—God; and Father Humphrey has done well in singling out the all-important question of God's existence and nature as the object of his endeavors.

The present volume, which we are here reviewing, contains much that is valuable and abounds in clearly defined principles which are so many avenues of escape from the meshes of false philosophies and latter-day reasonings concerning the nature and attributes of God. It will serve to define positions which are, and have been, grotesquely misrepresented and cannot fail to impress the painstaking reader with a realizing sense

of the beauties inherent in the idea of a God who is not a part of the universe, nor yet a power in continuous development, but an infinite sea of existence and perfection. Father Humphrey's name is not unfamiliar to Catholic readers who remember with pleasure and profit his "Conscience and Law," which is an excellent summary of ethical definitions and principles.

This volume, however, is open to much criticism. However deferential one may feel towards the reasons which the author adduces in defense of the title which he has chosen for this work, the associations called up by the phrase "His Divine Majesty," are commonplace, to say the least, in our vernacular. In the Latin tongue or those which are kindred to it in genius and origin, a title such as this would serve a most reverential purpose. But it is hard to see what there is to be gained from its employment in a language whose very associations defeat the object for which it was intended. Again, such a phrase as "the human soul of God" (page 56), even when applied to Christ, is harsh sounding and theologically incorrect. It violates the theological rules laid down for the "*communicatio idiomatum*," and theologians invariably speak of "*anima Christi*," and not "*anima Dei*." In addition, some of the direct renderings of the scholastic terminology into English, destroy the force of the original. Instead of saying (page 265) that "angels can also be moved by local motion," why not say "angels can move with local motion?" "Moveri" is not always used in a passive sense. One is not prepared to meet with sentences such as these: "Angels" (page 264) "are, however, in a place, in the sense that when they are in *this* place, they are not in *that* place; when they are *here*, they are not *there*." "Man consists of two substances, flesh and spirit" (page 321). Flesh is not divided against spirit, but against blood, neither of which, philosophically speaking, may be denoted as substances. Furthermore, the author characterizes the possibility of the existence of the created universe from eternity as a chimerical idea, intrinsically involving contradiction (page 257). This is a question which St. Thomas left open, and although the fact of creation in time is beyond all gainsaying, it seems too much to dismiss the possibility of an

eternal creation with the single remark that it is "a confusion of mind between the indefinite and the infinite." This statement of the author is all the more surprising as he is using the very same definitions which St. Thomas employed in the discussion of this question.

The author has marred his work by the heavy and difficult terminology which he has taken no pains to translate into modern speech. Where so many pages presuppose for their proper understanding a knowledge of the Latin terms and the genius of their formation, we fear that the sublime drift of the author's meaning will be lost on many readers. This is all the more regrettable, as there is at present among the English-speaking people, unfamiliar as they are with scholastic thought in Latin, a manifest desire to learn more of those great truths with which every page of Catholic theology and philosophy is replete; which, however, they cannot but fail to appreciate from the very nature of the case, unless the lesson is written in a language the full force of which they are prepared to grasp and understand.

St. Paulus und St. Jacobus über die Rechtfertigung. Von Dr. Bernhard Bartmann, Religionslehrer in Dortmund. B. Herder, St. Louis, 1897.

This volume forms a part of the "Biblische Studien," which many noted Catholic professors in Germany are engaged in publishing. It deals with the question of justification and is a critical study of the texts touching this point in the epistles of St. Paul and St. James. The controversy between Catholics and Protestants as to the relation between faith and good works, which has been heightened of late owing to the extensive prosecution of biblical studies in Germany, affords the author a good field for research. The opinions of the Fathers, the practice of the apostles in their first missionary journeyings; the nature of faith and good works on the one hand, and their interrelations on the other; the correction which St. James makes of false impressions entertained by the Romans as to the drift of St. Paul's teaching in his celebrated epistle to them, as well as a comparative study of the views of St. Paul and St. James, form the topics discussed in as many chapters throughout this work of Dr. Bartmann.

The author has taken into account the most pertinent views for and against the Catholic position, and displays a wide erudition which he cogently supplements by a series of painstaking analyses. The attitude of St. Paul towards the works of the Old Law is minutely portrayed as one of exclusion, and there can be no doubt in the mind of the reader who pays due attention to the author's line of argument, that St. Paul, in his epistle to the Romans, is excluding the works of the Old Law as a part of the Christian dispensation. The counter-view that St. Paul is here engaged in an elaborate denial of the necessity of good works in any scheme of salvation, old or new, is without warrant, either in the text or purpose of the epistle. There are many interesting passages on the nature of Christian Faith and Love in which the latter appears as the soul of the former, and, therefore, a requisite for justification. The inconsistency of admitting charity as necessary for the keeping of faith, while at the same time excluding it as one of the requisite prime factors in justification, is clearly pointed out. The texts upon which so much stress is laid, such as the "just man liveth by faith" and such like, are merely affirmative. The burden of proof is upon those who would make these texts exclusive; in attempting which they would nullify the principles of hermeneutics.

This volume is one which will repay diligent study. The notion of justification by faith alone vanishes into a mist of feeling when one has grasped the author's force of reasoning and detailed explanation of the Scripture texts. To those who would like to have a careful sifting of the arguments bearing on either side of this controversy, and who would wish to judge of the question by its merits, as well as the merits of the debate, this book will prove most satisfactory. There is a fair sprinkling of the old views with the new, and the strength of the patristic and Catholic view of justification comes out unimpaired from latter-day criticism. The work is not apologetic, but direct, critical, and searching.

Institutiones Theologiae de Sacramentis Ecclesiae. Auctore Ioanne Bapt. Sasse, S. J. St. Louis: B. Herder, 1897. \$2.90.

The Sacraments of the Church have always been a matter of much study, and there is an abundant literature on the sub-

ject, both patristic and scholastic, which must perforce be treated in any volume that deals with these sacred things. Man's double nature, his dependence on eternal stimuli for thoughts even of the Creator, the sensible signs in which he expresses his most abstract ideas, mark the path of his history, and bring out into relief the divine condescension to deal with him after the manner of his nature. Some there are who reason concerning man as if he stood out of all relation with the things of sense. They fail to see the perfect fitness of a divine economy which reaches man's innermost self through the ordinary channels of the sensible, as is indeed the way our nature would indicate,—the very lines along which it is suitably developed. To such as these the Sacraments are meaningless, because they fail to realize the great fact that what begins with sense is consummated in the spirit and what is sensibly a sign produces spiritually what it signifies externally. Housed in a tenement of clay, the human soul expresses its most spiritual conceptions in a language of the senses and what wonder that God in His mercy should choose symbols of sense to effect the double purpose of producing grace in the soul as well as a profound impression on the individual recipient, who is made to realize through striking sense-analogies, the hidden work which is being done within him. The fault with many nowadays is that they first construct an arbitrary way of looking at things and then withhold assent from whatever does not square with their position. They color the glass and become unconscious of its coloring.

The present volume of nearly 600 pages deals with the nature and necessity of sacraments in general; develops the difference between the sacraments of the old and those of the new dispensation, and then proceeds to treat singly each of the seven sacraments instituted by Christ. The volume abounds with positive historical and controversial information as well as detailed philosophic reasoning. The divisions are clear and complete and there is scarcely any pertinent scholastic question of moment omitted. The author holds that the sacraments of the New Law are only moral causes of grace and dissents from the view that they are real physical causes.

He does so, however, in a critical spirit and has taken the pains to collect many relevant passages from the older writers. In treating of the Eucharist, for some reason not stated, he narrows down the views respecting the terminus of transubstantiation (p. 398) to those of "adduction and production." This is not a full statement of the case. There is another view exposed by Cajetan which is entitled, at least, to the benefit of consideration. The notion and nature of the sacrifice of the Mass are well presented towards the close of the volume and cannot fail to impress the student with the author's minutely critical method. He supplements this exposition by a number of very practical and valuable principles.

The author has effected a very orderly combination of the speculative and positive methods, which makes this work of value and interest to students and professors. Occasionally one meets with a philological excursus like that on page 316 which is read and remembered with profit. In addition, the style is exceptionally good and well sustained throughout. If externals be a matter worthy of note, this volume is tastily put together and its unique binding cannot fail to please the artistic sense.

Philosophy.

Die Jenseitshoffnungen der Griechen und Roemer nach den Sepulcralinschriften, Von Carl Maria Kaufmann; Herder, Freiburg im Breisgau; B. Herder, St. Louis, 1897. 8°, pp. 85.

The conclusion of the great scholar Ernst von Lasaulx in his researches concerning the belief of the Greeks as to the value of life was a disheartening one. From Homer to the last of the Alexandrine poets there is a common consent that it is full of misery, and that man walks forever beside an abyss of darkness. The author of the thesis above cited contests the accuracy of Lasaulx's statement, and maintains that the epigraphic remains of the Greeks and Romans, as well as their iconographic and plastic monuments, show the very early existence and the permanence of belief in a "*vita beata*," a future life of bliss and immortality. Though the most ancient Greek inscriptions from the seventh to the fourth century B. C. are almost utterly silent as to the future life, our author ascribes

this fact to the absolute fixity of the popular belief that never thought of questioning it. Otherwise there would be a chasm between the sepulchre-cultus of Mycenæ and the archaic Athenian Dipylon *tituli*. The proclamation on these epitaphs of the virtues of the deceased and the scenes of departure for the other world seem also to hint strongly at belief in a realm of bliss. From the third to the first century B. C. we meet on the epitaphs with incipient insecurity and doubt, while in the four centuries after Christ the pagan epitaphs furnish a bewildering variation of doubt, denial, and firm hope. Very interesting are the possible influences of Christian teaching after Marcus Aurelius on the language of the Roman epitaphs,—spirits appearing to guide the soul into Elysium, an echo of the "*Communio Sanctorum*," and the motif of more than one fresco in the catacombs. Thus—

Me sancta Venus sedes non nosse silentum

Jussit et in Caeli lucida templa tulit, (C. I. L. VI., 21521).

Nevertheless, the prevailing opinion was surely not unlike the view, expressed in the following line of a Roman epitaph (C. I. L. VI., 15546):—

Nil est miserum quam totam perdere vitam

Nec vitæ nasci . . .

or in this Greek epitaph that pronounces Hades and Charon mere fables, and death the end of all:

οὐκ ἔστ' ἐν Αἴδου πλοῖον, οὐ προθμείς χάρων.

οὐκ Ἀιακὸς κλειδοῦχος, οὐχὶ Κέρβερος κύων,

ἡμεῖς δὲ πάντες οἱ κάτω τεθνηκότες

ὅστέα τέφρα τε γεγόναμεν, ἄλλο δ' οὐδὲ ἔν.

The numerous mysteries of the Greeks and the revival of earlier teachings of Plato and Pythagoras contributed to keep alive among the pagans a belief in a future life of happiness in the "Isles of the Blessed" or beyond the ocean, or among the heroes and the gods of old. But cynicism and despair were everywhere eating out the heart of this venerable belief which the scandal of their national humiliations had led the Greeks to abandon almost entirely. We must say that a careful perusal of this otherwise well-executed study has not convinced us that Lasaulx was very far wide of the truth in his judgment on the old Greek faith in blissful immortality.

Dante and Catholic Philosophy in the Thirteenth Century. By Frederick Ozanam ; translated from the French by Lucia D. Pychowska. New York, 1897. The Cathedral Library Association ; 8°, pp. 507.

There is no need to recommend the original study of Ozanam on Dante and Catholic Philosophy in the Thirteenth Century. It ranked at once as a classic exposition of the true spirit and principles of the great poet. The latter has henceforth his place between St. Thomas and the Gothic architecture. As in the latter the mediæval love of order and justice broke out in the great symphonies of granite and marble that the world yet admires, so in Dante the solid framework of reasoning built by St. Thomas was ornamented with all the charms of the most sublime poetry, of a grave and quasi-celestial music that haunts forever the ears and mind of the listener.

In Dante the spirit of the Rue de la Fouarre and that of the Abbey of St. Victor are allied. In his immortal work the aspirations of the mystic are voiced in philosophical language of a faultless correction. The theologians compelled Dante to write his admirable Credo ; but no philosopher of the Middle Ages ever called in question the technical dialectic skill of the man who wrote the most wonderful of didactic epics, nor his formulations of the doctrine of the Angel of the Schools.

If there is to be a revival of scholasticism, Dante will have no small share in the honor. Naturally he appeals to the educated lay world as no Latin-speaking ecclesiastic ever can. As the boatmen of Venice solve all the riddles of life with a snatch from Tasso, so does it come natural to close any line of scholastic thought with one of those grand *terzine* whose authority seems to fall about us in a shower of melody and grace. *Nihil quod tetigit non ornavit.*

The Cathedral Library Association deserves great credit for bringing out this volume. It is a pity that so minute a type should have been used, but in another edition that defect can be easily remedied. There is also wanting an index, something inexcusable in a book of such solid value, and where more than once the same ideas receive a varied treatment. Apart from these defects, the book is highly commendable, and should be in the hands of every lover of the history of philosophy, and of the history of great institutions in general, for apart from the philosophy which governed their actions

and through which they looked on the world about them the men and women of the Middle Ages will be forever unintelligible to us.

Ontologia: Metaphysica Generalis. Auctore P. Carolo Delmas, S. J. Parisiis: Victor Retaux. 1896.

This is a compact volume of some 850 pages, treating the fundamental notions that underlie the science of metaphysics. The author follows the divisions usual with scholastic philosophers in works of this kind, and deals exhaustively with the subject-matter at issue. There are many good points in this treatise worthy of special mention. The whole field of general metaphysics is distinctly divided from the outset, and the points under discussion as well as the conclusions brought out in the course of the author's reasoning, are relieved in larger type, which facilitates the study of an already difficult subject and serve to mark the progress which the student is making from point to point in its perusal. The treatment of the notion, nature and divisions of Being is minute and exhaustive. The author is not afraid to quote an abundant literature, and enforce the worth of his conclusions from counter-considerations. This is especially commendable, as it enables students to realize how well the old philosophy of Being holds its own with the newer, vaguer, and more complex notions which serve as prop and pillar to the pantheist or, as he is now more fashionably called, the cosmic theist. If there be anything in the philosophy of St. Thomas which is capable of the best results in the minds of thinkers who have once grasped the secrets of his method, it is the Angelic Doctor's explanation of that most universal and indeterminate of concepts—the concept of Being. The avenues of escape from pantheism and idealism are made clear to those who would avoid the indignities of the one and the consequences of the other.

Had the author, however, brightened his treatise by a fuller portrayal of modern views, and instead of merely exposing these latter as so many points out of touch with his own, instituted a comparative criticism of their objective worth, he would have accomplished his purpose more directly and established his position more convincingly. The tenets of Hume,

Locke, and others, concerning the nature of causality would have been more easily disestablished, had they been attacked directly. The notion of productive causality suffers when the insufficiency of Hume's view is allowed to pass as a mere matter of inference, without being disproved directly by a criticism of Hume's dogmatic limitation of the sources of knowledge to sensation and reflexion. The latter is certainly a better method of refutation than the one adopted by the author. It strengthens the old idea and criticizes the newer notion of empirical antecedent on the very grounds and principles which its advocates claim for it.

The author's quoting of St. Thomas as in favor of the virtual distinction between essence and existence is shifting. He tries to explain away his meaning (pp. 215-220) by showing how the words of St. Thomas may be interpreted in a narrower sense. This, we take it, is a makeshift. The question in debate is not how the doctrine of St. Thomas may be reconciled with the author's point of view, but what the Angelic Doctor really held on the point at issue. The history of this much mooted question is proof sufficient that he stood for the real distinction. His most ardent disciples conceded it when they argued in favor of his view against those who held the contrary, and De Maria has well summed up the entire controversy in his "*Philosophia Scholastica*." Whatever the merits of these opposing tenets, the question as to what St. Thomas held should not be made one of possible interpretation, but of consistent exegesis and historic fact.

The author's divisions are clear, and though there is nothing new in his exposition, we feel that professors and students will find here, solidly compacted together, the fruit of years of teaching.

History.

Die Thätigkeit und Stellung der Cardinaele bis Papst Bonifaz VIII., historisch canonistisch untersucht und dargestellt von Dr. J. B. Saegmueller, professor an der Unversitaet Tuebingen. Herder, Freiburg im Breisgau; B. Herder, St. Louis, 8°, pp. 262. \$1.80.

For the first time we possess a scientific study on the evolution of the cardinalitial office. Countless volumes have been written on it from many viewpoints, but none has so happily pictured the genetic process by which was formed the powerful senate of the Roman Church. It is a theme that might tempt any historian, whether we consider the multitude of the materials, the greatness of the interests, situations and passions involved, the deep institutional questions that present themselves, or the dramatic splendor of the long genesis affected at every great turn in the world's history by new and unknown influences, that now hem in, now mightily develop the activities of this extraordinary council of men. No story of the Amphictyons or the Areopagus, not even the magnificent panorama of the Senate of the Roman Republic, can so fascinate the student, for it gathers in its wide sweep all interests,—spiritual, temporal and mixed,—all lands, cultured or barbarian, the Old World and the New, and it covers as long a time as the story of the Papacy itself.

The unbroken self-consciousness of the latter institution finds nowhere so vivid and tangible an expression as in the history of the College of Cardinals, at once its official counsellor and its executive arm, the protector of its permanent interests—its eye, hand, and brain. We recommend this admirable study to our readers. It is based on the Papal registers, not only of Jaffé and his later editors, and of Potthast, but also on those of the thirteenth century published by the French School at Rome and by others. The labors of Phillips, Hinschius, Hefele-Knoepfler, Thiel, Duchesne, Gregorovius, Denifle, Fabre, various writers in the second edition of Wetzer and Welte's *Kirchenlexikon*, and the results of a number of special studies on matters relative to the main issue, have been incorporated into this work with a patience and a sagacity that deserve all credit. The study is divided into two parts—the range of the cardinalitial activity in history, and the relative office or position of the Cardinals. The first part is again

subdivided into two sections, the first of which treats in detail of the development of the Cardinalate, *sede plena*, to the death of Boniface VIII. (1303); the second treats of their administration of the Church, *sede vacante*, within the same limits. The small volume of the study ought not to deceive the reader, for it leaves untouched scarcely any of the many questions, constitutional or otherwise, that come up for treatment, and it may be read with profit as an extension of the History of the Councils by Hefele, as a preparation to Pastor's History of the Popes, or as a historical commentary to certain portions of the "*Corpus Juris Canonici*."

Jahrbuecher der Christlichen Kirche unter dem Kaiser Theodosius dem Grossen. Versuch einer Erneuerung der Annales Ecclesiastici des Baronius fuer die Jahre 378-395, von Gerhard Rauschen, Doctor der Theologie und Philosophie, Ober und Religionslehrer am Kgl. Gymnasium zu Bonn. Herder, Freiburg im Breisgau. B. Herder, St. Louis, 1897. Pages xvii-609; \$4.00.

There is something so natural and satisfactory in the annalistic form of history that men return to it with pleasure, even after all the success and prestige of philosophical and institutional history. Take, for instance, the scholarly "*Annals of the German Empire*," now in progress of execution, and in which the results of a century of criticism are finally embodied. Dr. Rauschen has undertaken a revision of the "*Annals of Baronius for the years 378-395, or the period of the reign of Theodosius the Great*." To begin with, the events of each year are narrated with more order than in Baronius, being arranged under eight rubrics: emperors, imperial magistrates, religious and profane legislation, councils, fathers of the church, prominent bishops and heretics. Thus, all that is pertinent, in any year, to any of these rubrics, may be found at a glance. The period is one of the most important in church history. The relations of the Church and State, the codification and modification of the Roman law, the gradual suppression of paganism, the details of the civil service of the empire, the chronology of the councils and of the literary history of the Christian Church, are very grave items of historical study, and furnish the staple subjects of this important volume. Besides the corrections and additions of Pagi, Tillemont, Hefele, and other critics of Baronius, Dr. Rauschen has worked into this volume the best

results of the general works on the last days of the Western Empire, like Richter, Gueldenpfennig, and Ilfland, and of special studies on the Christian fathers such as have appeared from Foerster and Ihm on St. Ambrose, Zoeckler on St. Jerome, Ullmann and Draeseke on St. Gregory Nazianzen, Rade on St. Damasus, Ribbeck on St. Augustine, and several others.

The criticism of Baronius bears really on the sources or authorities used by the great annalist, and in his introduction Dr. Rauschen has some well-weighed pages on these authorities, notably on Socrates, Sozomen, and Theodoret, to which must be added his remarks on the heathen writers Zosimus and Eunapius, and on the difficult but indispensable *Chronica Minora* (*Fasti Idatiani*, *Anonymus Cuspiniani*, *Chronicon Paschale*, etc.) into which, during the fifth century, there passed no small share of the Imperial Annals of Ravenna now lost to us.

Occasionally the annalistic style is capable of much warmth and coloring by the skilful juxtaposition of facts and statements. The revolt of Antioch (pp. 255-266), the destruction of the Serapeum at Alexandria (pp. 301-303), the massacre of Thessalonica (pp. 317-322), are examples of the nervous eloquence to which the annalist may at times arise.

Within this brief period our author has found a multitude of nice questions of chronology, on which he has exercised his critical skill, very often with praiseworthy success, *e. g.*, the date of the Council of Rome in 378, the date of the *Peregrinatio Sylviæ*, of the death of St. Basil the Great. From the Code of Justinian (xi. 7, 4) he draws a conclusive proof that Illyricum was not divided into East and West in 379, since as late as 386 it was all under one jurisdiction. Of great importance to all scientific theologians and ecclesiastical historians are his excursus on the Creed of the Mass, which he does not admit to be identical with the Creed of Constantinople of 381, on the date of the origin of the papal vicariate of Thessalonica, on the possible Christianity of the court poet Claudian, and on the abolition of the office of public *poenitentiarius* at Constantinople by the patriarch Nectarius (Socrates, v. 19 ; Sozomen, vii., 16).

No teacher of early Church history can afford to be with-

out this valuable contribution to the history of the first century of triumphant Christianity, and no student of the Fathers can fail to take a deep interest in the critical treatment of the writings of St. Ambrose and St. Chrysostom, and in the lengthy study of the latter as a popular preacher (pp. 495-429, 565-574). The book, with its future continuations, deserves place in every public or private library that finds use for the "Annals of Baronius."

Sainte Clotilde. Par G. Kurth, Professeur à l'Université de Liège. Victor Lecoffre, Paris, 1897. 8°, pp. 180.

Professor Kurth has given us in this charming little volume a resumé of what can be known with moral certainty or probability concerning the life of Saint Clotilde, the wife of the great Clovis whose conversion in 496 brought to the support of orthodox Western Christianity the prestige of the victorious nation of the Franks, and ended the supremacy of Gothic and Burgundian Arianism. The style of the narrative is at once picturesque and clear, and the author has understood how to fill in with contemporary portraits and sketches the numerous *hiatus* that the life of this interesting saint offers us. Surely no one was better able to undertake the life of Saint Clotilde than the gifted author of the "Histoire Poétique des Mérovingiens. St. Gregory of Tours, and such continuators of his "History of the Franks" as Fredegarius, have left us pictures of Saint Clotilde that were only too evidently based on legends of pagan barbarian origin. These non-Christian elements in her life have been eliminated by the sure criticism of M. Kurth, and we have to thank him for a task not unlike the cleaning of a palimpsest, or that process which restores to us on one day the portrait of Dante on the walls of the Bargello, and on another the outline of some noble fresco of Giotto.

The book is the first in a series of "Les Saints," brought out by Lecoffre, at Paris, under the direction of M. Henry Joly, who is himself to write for the series a volume on "The Psychology of the Saints." The collaborateurs are selected from among the best known Catholic savants of France, both lay and clerical, and the program of the enterprise sets forth with reason that "it is time to write the lives of the saints in a

spirit at once more critical, literary, historical, and social than has hitherto been obtained. Hence, it is intended to present to the reader saints who have not only edified the faithful, but have also exercised a visible influence on civilization, manners, ideas, philosophy, literature, and the arts. The mere grouping of these narratives would tend to destroy the senseless prejudices that would separate the best things in humanity—religion and the normal evolution of our nature—hold useful activity as incompatible with the profound development of the spiritual life, and exaggerate the differences (too often real, but nowise necessary), that distinguish the great man properly so-called from the saint."

These are the ideas of the Bollandists, and even before their time were forcibly expressed by the great theologian Melchior Canus, and by the humanist and educator Ludovicus Vivès.

Saint Augustin. Par Ad. Hatzfeld. Paris: Victor Lecoffre, 1897.

It is always a pleasure to take up a book which is charmingly written and free from the least approach to exaggeration or extravagance. We are made to feel that the author is not a hero-worshipper but a scholar who knows the value of facts and desires to set them before us in a style which is critical without being heavy, pleasing without being overdrawn or fanciful. The life of St. Augustine is one that the Christian soul shall never tire of knowing. In it we may see the various phases of belief realized one after the other until the fulness of Christian truth rounds out a character that was as restless as a bird of passage. The brilliancy of mind which marked off the young African from his compeers; the struggles of head and heart to find satisfactory solutions for the problem of existence in Manicheanism and Neo-Platonism; the dawning of a better day when the first light of Christian truth was seen to break through Paul's epistles; and finally, the abandonment of the rubbish of pagan notions and a career of evil for the yoke that is sweet and the burden that is light, endear the name of Augustine to the Christian, who sees in him a striking illustration of what the truth of God accomplishes in a noble soul. The author bears us on from point to point with unflagging interest and guarantees every statement which he

makes by constant reference to Augustine himself in those many writings which he has left us as an enduring picture of his soul's impressions. The first ninety pages portray the life and experiences of Augustine: the last ninety are concerned with his theology and philosophy. An extensive bibliography closes the author's work on his illustrious subject and acquaints the reader with many standard writings in which, if he be so inclined, he may learn more of the philosopher, theologian, bishop and Father of the Church.

We heartily recommend this volume. Our reasons for so doing may be expressed in the words of Fénelon: "The true means of making a portrait which shall be really a likeness is to depict the complete man: to put him before the eyes of the hearers, as he spoke and as he labored. In recounting the course of his life, it is quite right to bring into the foreground those parts of it in which his natural virtues, as the graces bestowed upon him, more manifestly appear; yet something must be left for the mind and imagination of the hearer to fix upon. The best means of praising a saint is to relate his praiseworthy actions. It is this which bestows solidity and strength to a eulogy; which instructs and impresses the hearer." We might add to this: avoid extravagance and keep within the bounds of historical sources. All this the author has done, most creditably producing a work which may be read with pleasure and profit. While recommending this life of Augustine, we wish also to recall to mind the honored publishing-house of Lecoffre, which has accomplished so much for the spread of Catholic literature and which is continuing its excellent work in a series entitled "*Les Saints*," of which this life of Saint Augustine is a most praiseworthy beginning.

The Life of Father Charles Perraud. By Augustin Largent, Priest of the Oratory, Professor of Apologetics at Paris. New York: The Cathedral Library Association, 1896. 8°, pp. 97.

The introduction to this work, written by Cardinal Gibbons, tells us that it relates the "life of one who may well serve as a model to the parish priest, the pulpit orator, the director of souls, the leader of men." Father Charles Perraud (1831-1892), the disciple of Père Gaty and Lacordaire, and the friend of

Henry Perreyve, was one of the most striking figures in the Catholic France of the second half of our century. As preacher and apologist his sermons and conferences won him wide renown. His zeal and eloquence made him favorably known to a multitude of souls outside of France but who were deeply affected by the great religious currents in Catholicism that so habitually rise in France, to spread thence over the whole world. It was a happy thought to provide by an English translation a wider public for these instructive pages. One excellent paragraph we copy from page 50: "Charles Perraud loved men. He loved by preference the lowly, the poor, those whom the juridical language of Rome called disdainfully '*humiliores*.' He wished to make it evident to all that Christianity, full and entire, that Catholicism, which has the promises of the life to come, has also those of the life that is; that Catholicism is the essential and solid foundation of individual happiness and social prosperity; that it answers to all legitimate aspirations of the reason and heart of men; and that far from impeding progress, it helps it on in every direction."

English Literature.

Dumb in June. By Richard Burton; Boston: Copeland & Day, 1896.

A confirmed habit with the modern critic is to speak of a "poet's place." Now, no poet has any place outside the hearts he has taught to love him until he dies. There are many hearts that love Richard Burton's poetry, and his little book will be welcomed by them. Whatever Mr. Burton's place may eventually be, he has the singing gift, the quality of taste, and, above all, insight into the moods of the mind and the tenderest sympathy with men and nature. "Dumb in June"—a title which is inappropriate in the mouth of a poet who is so delightfully articulate in all seasons—names the book. In it Mr. Burton shows how musically the varied ode movement may be used. He spoils some fine lines by "archaisms" similar to those for which William Morris's, "The Earthly Paradise," set the fashion. "Across the Fields to Anne" will always give genuine pleasure to those who have trodden the footpaths to Shottery with the Shakespearean glamour upon them. "Of One

Afflicted with Deafness," is the sweetest and most touching poem in the volume.

"Realists" and "Masks," fine sonnets, are of the mind and heart; he reaches the fundamentals in life, which is much at a time when the poet is tempted in his search after the original, to achieve only the audacious. "Dumb in June" is a vital book. Whether Mr. Burton writes another or not, one is enough to stamp him as a poet of high talent.

English Prose. Selections with Critical Introductions by various writers, and General Introductions to every Period. Edited by Henry Craik. New York : The Macmillan, 1897.

It is natural enough for men who have attained a mastery of books to look down upon the compilers of "selections." And it is natural enough for compilers to take their work less seriously because they are "only" compilers. Neither of these positions will stand the test of reason or experience. Thomas Humphrey Ward's "English Poets" is of unique value; it is a work of erudition, taste, and intelligence, and Henry Craik's "English Prose" is the only existing companion to it.

"English Prose" is divided into five volumes. It includes the men who began to develop our language and the men who have brought it near to perfection. The last selection is from Robert Louis Stevenson's "Travels with a Donkey," and the pieces, next to this last, are from that over-wrought stylist, Walter Pater. The editor shows his catholicity by his choice of specimens. We are accustomed to have the editors of similar books apologize for Sir Walter Scott, because Sir Walter was never almost pedantic, like De Quincey, nor exceedingly mannered, like Pater, nor somewhat artificial, like Stevenson. It is common to sum up Sir Walter's defects of his qualities by saying that he is "no stylist." But Mr. Henry Craik is at once too philosophical and too broad-minded to confound style with the scrupulous care for style merely as style. The true test of style is not a philological test; it is a test of effectiveness. The main question is, has the author produced the effect he intended to produce? It is not a scientific, but an artistic question. In his preface to the fifth volume, the editor gives an illustration of this. Speaking of Scott, he says :

"It is rather in the lighter treatises on every variety of subject, which he contributed anonymously to reviews, that we look for his best writing, and they leave upon us a far higher impression of Scott's power as a writer of prose than do his novels. In the novels our interest is absorbed by qualities that leave us little attention to spare for style, but these articles, poured forth so easily, owing nothing to the commanding interest of drama and of story, without the variety supplied by dialect, or the play of character in dialogue—show how light and easy was Scott's touch, how quickly he could command interest, and they explain how his prose writing was prized and sought for, even when it was in no way associated either with his name or with the half-shadowed personality which he chose to assume in connection with the novels." Style merely as style, words and groups of words were not used by him, as Leonardo da Vinci probably used his fragments after careful analysis. Style to him had not the same meaning as it had to Flaubert and Pater and Stevenson, yet to him, as the editor says, "we can scarcely deny a mastery of words." Mr. Craik's assistants in this work have been admirably chosen, and, what is more, they all write with evident understanding of the very definite plan of the editor. Saintsbury treats "Sir John Mandeville;" Martin Dobson, "Goldsmith;" Gosse, "William Camden;" Minto, "Lord Bacon;" and W. J. Courthope, "Pope." "English Prose" leaves no room for another volume on a similar plan. We trust that the extracts from Landor may revive interest in his "Imaginary Conversations," not at present appreciated at their full value, and we have only one regret—that no piece of Congreve's excellent prose has been given.

The Philosophy of Literature. By Condé B. Pallen, Ph. D., LL. D.

Dr. Pallen, in his preface to the series of lectures arranged under this title, says "no man has a right to publish unless he has a reason for it," and he proves his belief in this by uttering with all his force old truths which he believes need re-statement in a new way. "Literature is the written expression of man's various relations to the universe and the Creator," Dr. Pallen says, and on this definition he founds the main part

of his thesis. He points out that the literature of decadence, reflecting life imperfectly, must be null since it does not accept this definition. "The primal relation to God is the basis of literature, and even when men seem furthest from God, none the less distinctly, but more darkly and awfully does the shadow of their dependence grow." An examination of the literature of naturalism—the attempt to subordinate even art to the methods of Claude Bernard—shows how true Dr. Pallen's statement is and how great is the need for constant emphasis upon it. It is stimulating and refreshing to hear the voice of a poet raised with such a firm, sure sound at a time when, especially among the most acclaimed of the moderns, such as Carducci and Swinburne, Shelley and Byron—whose renaissance is at hand—poetry is of the mood rather than the intellect. Dr. Pallen founds his utterances, when he seeks to express clearly the essence of things, upon Donoso Cortes and M. Ernest Hello, with whom he is evidently much in sympathy. He leaves no room for the doubt that permeates so many works of the poets, from "Hamlet" to "Le Centaure." "Cherchez-vous les dieux, ô Macaire! et d'où sont issus les hommes, les animaux et les principes du feu universel?" cries Maurice de Guérin. Dr. Pallen answers "from Christ," to whom all things looked forward from the beginning and to whom all things will look backward until the end. But he speaks to a world which is in doubt because it loves the sensations and effects of doubt—doubt which is as prismatic as the tint of a stagnant pool. Dr. Pallen's prose expression is very unlike his poetical. It is hard to believe that the somewhat hard and unplastic style of this book comes from the author of certain lovely sonnets which had vogue not so long ago in this country and in England. It is true that the words printed here were written to be spoken rather than read, and that the lecturer addressed himself to an audience that could supply much that was unexpressed.

Dr. Pallen traces all that is high and beautiful back to Divine Love—Love in life that, as he has said, in one of his sonnets,—

" Gives all his strength,
And stronger grows the longer he may live,
Nor can he weary through eternal length
Of years while Love to Love himself may give;
For Love does make of Love immortal life,
And weds unto himself Eternity for wife,"

Natural Sciences.

An Introductory Course of Quantitative Chemical Analysis, with explanatory notes and Stoichiometrical Problems. By Henry P. Talbot, Ph. D., Associate Professor of Analytical Chemistry in the Massachusetts Institute of Technology. New York: Macmillan, 1897.

It seems to be a tendency of our modern text-books to present to the student an ever increasing quantity of matter, far beyond his powers of healthy assimilation in the time at his disposal. This defect has been recognized by a few authors in recent years, and several text-books have been produced which deal with a small number of subjects in so thorough a manner that the student acquires a method and habit of study which will endure and enable him thereafter to be his own guide in kindred lines of thought and work.

Talbot's Quantitative Chemical Analysis is just such a book. *Non multa sed multum* is its motto. The subjects for analysis, though few, are so selected as to illustrate the best methods of gravimetric and volumetric determinations, and the working directions and explanations are so complete and concise that careful attention to them cannot fail to inculcate that accuracy of work so essential to scientific habits. Professor Talbot's Quantitative Analysis is an excellent preparation for advanced work in analysis.

A Detailed Course of Qualitative Chemical Analysis of Inorganic Substances. By Alfred A. Noyes, Ph. D., Assistant Professor in the Massachusetts Institute of Technology. Third revised and enlarged edition. New York: Macmillan, 1897.

This book, like so many other manuals of analytical chemistry, is based on the classic work of Fresenius, but with such modifications as long experience in one of the best of our American laboratories have suggested. One of two defects common to a great number of text-books of quantitative analysis is the tabulating of "schemes." These, though they give the student a certain amount of "analysis made easy", still, in detecting the common elements by a comparison of the physical properties of solution or precipitates obtained, with those indicated in the tables, are of very doubtful value, if not positively injurious as a factor in the student's education, for they confine the exercise of his faculties of observation within very narrow

limits, and form an imperfect and erroneous notion of the science. In this book we will meet with a number of tables, but here they are not given as a working basis, but as outlines to the work, as introductions to a carefully worked out and fully detailed method of procedure, accompanied by copious notes, critical and explanatory, so that the student is not only taught what to do, or what modifications varying conditions necessitate, but—what is of a greater importance—he learns *why* he does so. A very good example of this valuable feature of a text-book is found in the notes on oxidation and reduction—reaction of very great importance in analytical chemistry—which precede the methods for the separation of the metals of the aluminum and iron groups.

The changes introduced in this edition under notice are such as have been suggested by recent researches, and strengthen the book in its position as one of our most excellent manuals of qualitative analysis.

Miscellaneous.

Manual of Hebrew Syntax. By Rev. J. D. Wijnkoop. Translated from the Dutch by Rev. C. Van Den Bissen. London: Luzac & Co., 1897.

Within the compass of 152 octavo pages, the author of this work has presented a fair treatment of Hebrew syntax. The work is not intended to be an original or an exhaustive treatise on this complex subject. The author acknowledges that he has utilized what others have written on the subject; and those who are already familiar with Hebrew syntax will find little in the present work that they have not read elsewhere. The arrangement of the book is thoughtful and systematic; he treats successively the noun, the pronoun, the verb, the particles, and the construction of sentences. The rabbinical bias of the author seems to have induced him to set aside all the results of Textual Criticism, and to adhere steadfastly to the reading of the Hebrew text as determined by the Massorah. The critical study of this text has made much progress in late years. While no one is expected to accept every clever and ingenious emendation that a commentator may see fit to suggest, yet all Hebrew scholars of merit admit that certain passages of the Massoretic text are corrupt, and in consequence

they sanction some correction. Heretofore the attempt was made to explain the faulty construction of these passages by formulating special rules of syntax. But now, with the corrected readings, Hebrew syntax has been simplified in a large measure. The author of the present manual, holding to the traditional reading of the text, has, as a consequence, interspersed his book with many useless rules. To select an instance of this, see on pages 11 and 12 of his book, the explanation given for the Massoretic reading of I. Samuel 9, 24.

The chief merits of the work are its clearness and conciseness. The rules and explanations are intelligible at first reading. He displays rare judgment in the choice of his quotations from the Hebrew text. The English reads so smoothly that one would not suspect that it was a translation. The manual is fitted to give the beginner a comprehensive knowledge of the structural genius of the Hebrew language, and will serve as a good introduction to more exhaustive and more critical treatises.

Leprosy and the Charity of the Church. By Rev. L. W. Mulhane. Chicago: D. H. McBride & Co., 1896. 8°, pp. 155.

This is a popular but very touching historical account of the dread scourge of leprosy in ancient times, the middle ages, and in our own day. The origin and medical treatment are briefly touched on, while the care of lepers, notably by Catholic religious, men and women, is dwelt on in detail. And rightly, for this supreme self-sacrifice is one of the most striking characteristics of the true Church, which has not waited on the slow progress of medical science or philanthropy to pity or care for the most abandoned and repulsive of mankind.

What Christ Revealed. By Rev. L. Jouin, S. J., St. John's College, Fordham, N. Y.

The object of this little brochure of about 100 small octavo pages is accurately set forth in the preface as "a brief but reasoned exposition of the principal doctrines which constitute the faith of a Catholic. It will be of use in the instructions that are given at missions, and will serve as a text-book for colleges and academies." It contains an outline of the teaching of the Church concerning herself, the articles of the Creed and the Sacraments.

Le Travail des Couturieres en Chambre et sa réglementation par Hector Lambrechts. Bruxelles : Société Belge de Librairie, 1897, brochure, pp. 110.

M. Lambrechts bases his very instructive study on the "sweating system" on the article of M. Levasseur, "Le Sweating System aux États Unis (*Revue d'Économie Politique*, September-October, 1896). In three chapters he examines the abuses and dangers of this system, chiefly in the case of female workers, the remedies, general and special reforms, and the proper sanctions of any effective legislation. The author is clearly *au courant* of all the latest and best literature of the question, and we commend this comparative study of the cruel sweating system of to-day to the attention of those of our readers who are interested in questions of sociology.

Three Dialogues on Pulpit Eloquence. By Fénelon, translated and illustrated by quotations from modern writers, with an introductory essay, by Samuel J. Eales, M. A., D. C. L., Vicar of Hanfield, Kent. London : Thomas Baker ; Philadelphia : John J. McVey, 1897. 8°, pp. 174.

The Three Dialogues of Fénelon on Pulpit Eloquence remain forever a classic of unapproachable merit. They were written for the instruction of his own priests and seminarians of Cambrai, and so wear a unique air of paternal earnestness, shrewd and accurate observation of clerical manners and foibles, and abundant learning applied to the specific task of perfecting the mind, the heart, and the delivery of the preacher. They deal with false art and brilliancy in the pulpit ; with the object and nature of eloquence in general ; the necessity of proving, portraying and interesting ; with the principles of oratory, the method of learning and the manners of constructing sermons ; with the use of Scripture and the right method of explaining it ; with the substance of preaching, the proper use of the Fathers, the lives of the Saints, history, and the like. Scattered throughout the little volume are admirable pen-pictures of the ancient orators, their strength and their weaknesses, gem-like character-sketches of the great Christian preachers, and profound observations on ecclesiastical life and habits that possess the double charm of truth and piquancy. The translator has done his task well, save for a slipshod sentence here and there, and in the foot-notes he has added many pertinent illustrations from ancient and modern writers on the

pulpit, for which every reader will be thankful to him. Would that we could put into the hands of every aspirant to the priesthood this golden booklet, in which there are mirrored the tender mystic spirit of the great theologian, the fatherly love of the zealous archbishop, the veneration for and intelligence of the ancient classics that make the author of *Tele-machus* so unique and influential an educator!

Immortelles of Catholic Columbian Literature. Compiled from the works of American Catholic Women Writers by the Ursulines of New York (illustrated). Chicago: D. H. McBride, 1897. 8°, pp. 625.

A very useful compilation from the writings of some sixty American Catholic women. It brings before us new and old, familiar and unfamiliar pages of a literary character, and makes a large volume of useful selections from modern English prose and poetry. We commend to imitation the industry and the taste of the ladies of the Ursuline community, and bespeak a large sale for the book, which is well printed and artistically bound.

BOOKS RECEIVED.

Acknowledgment under this rubric does not preclude further notice.

Style in Composition, Advice to Young Writers, by William Poland, S. J., St. Louis University. B. Herder, St. Louis, 1896; 8°, pp. 25. 15 cents.

Formules Utiles d'Arpentage et de Mesurage des Corps, par le R. P. Laurent McCarthy. Bruxelles, Société Belge de Librairie, 1897; 8°, pp. 21.

The Catholic Library, New York, Charles Wildermann, 1897; ten volumes (16mo.) of short stories.

La Primauté de St. Joseph d'après l'épiscopat Catholique et la théologie, par C. M. professeur de théologie, Victor Lecoffre, Paris, 1896; pp. 513.

Die Chorgesänge im Buche der Psalmen. Ihre Existenz und ihre form nachgewiesen von J. K. Zenner, S. J., in Zwei Theilen. Erster Theil. Prolegomena, Uebersetzung, und Erläuterungen, mit einem Titelbild: Die Saengerriegen des ersten Tempels nach Kosmas Indicopleustes. Zweiter

Theil., Texte, Freiburg im Brisgau, Herder; B. Herder, St. Louis, 1897.

La Prédication, Grands Maîtres et Grandes Lois, par le R. P. G. Longhayé, de la compagnie de Jésus, 2^{ème} édition. Paris: Victor Retaux, 1897; 8°, pp. 553.

The Sacred Heart of Jesus; What it is; What it demands; What it gives. By Rev. Pierre Suau, S. J. Translated from the French by Marie Clotilde Redfern. Philadelphia. H. L. Kilner & Co., 1897; 12mo., pp. 131.

SCIENTIFIC CHRONICLE.

A Recalculation of the Atomic Weights, by Frank Wigglesworth Clarke, Chief Chemist U. S. Geological Survey; Part V., Constants of Nature, from Smithsonian Miscellaneous Collection.—Professor Clarke has given us a remarkable compendium of all the atomic weight work hitherto accomplished, with a most painstaking and careful criticism. Many chemists will, undoubtedly, take exception to some details. To quote from the introduction: "In fact, it is doubtful whether any two chemists, working independently, would handle all the data in precisely the same way, or combine them so as to produce the same final results." But this by no means detracts from the great value of the book, which is very far ahead of anything of the kind, so far attempted, displaying, as it does, very great skill in the treatment and arrangement of the matter. The utmost care has been bestowed upon every detail, and an unusual degree of confidence may be felt in using its statements. The amount of labor required in making and verifying the calculations has been very great, and might well appall any author, but Professor Clarke does not recognize such difficulties in his chosen field. Of course, the work has the inestimable advantage of being up to date, and will at once take its place as the standard reference in this field. The author himself sees most clearly its greatest value, as evidenced in another quotation from the introduction: "The data have been brought together and reduced to common standards, and for each series of figures the probable error has been determined. Therefore, however much my methods of combination may be criticised, I feel that my labors will have been useful. The ground is cleared, in a measure, for future experiments; it is possible to see more distinctly what remains to be done; some clues are furnished as to the relative merits of different series of results." In spite of the unusually increased activity in this field, within the last decade, the present work but more clearly emphasizes the immense amount yet to be done.

A Novel Method of Quarrying is reported to have been introduced in England. Instead of using high-power explosives for the separation of the material, the expansive force developed, when lime is converted into calcium hydrate, is made available for the purpose. The lime is formed into bars of convenient length, with a diameter of about 70 m. m., about an iron core and under a pressure of about 40,000 K. G. The iron core consists of a tube with a longitudinal slit and a number of perforations. The whole is inclosed in a suitable cartridge bag of canvas. The method of using the apparatus is quite as simple. The cartridge is introduced into the hole drilled to receive it, and is closely packed in with clay. Water is then pumped into the core. The lime expands with great force, pressures of 250 atmospheres being reported. The method is said to be cheap, and has a great advantage in being safe.

Injuries from the Use of X-Rays have been reported in a number of cases, and one of especial interest is described by Dr. J. C. Gilchrist in a recent number of the Johns Hopkins Hospital *Bulletin*. The patient was an exhibitor of apparatus for photographing by means of cathode rays, and frequently exposed his own hand. In about three weeks the skin began to redden and puff up, resembling sun-burn, as in the other cases hitherto reported. Soon the inflammation became much augmented, accompanied by severe throbbing and aching. The skin darkened, dried, cracked, and gradually peeled off, making way for new skin. A feature of this case not noted in the ones hitherto reported was a remarkable swelling of the bones, especially at the joints. They were very painful and sore to the touch. The sense of touch was seriously impaired and voluntary motion was lost for some weeks. Objects could not be picked up by the injured hand, unaided, and could be held with but slight force. The nails gradually fell out, making way for new ones. The inflammation disappeared gradually and the injured member is approaching a normal condition. It would seem that some caution is to be observed in working with these rays, especially after a prolonged exposure. The value of the method in making a diagnosis, etc., seems hardly to be affected, to quote from Dr. Gilchrist: "I do not think

that the possibility of injury ought to deter one from using these wonderful rays in surgical work, because only a few have been affected out of thousands who have been exposed to them. By keeping some distance away from the rays, injurious effects will hardly follow their use."

Immunity from Stings.—In a recent communication to *Nature*, Dawson Williams calls attention to some curious phenomena attending insect stings. As has been previously noted, after a certain number of stings from bees have been suffered, comparative immunity is attained. This appears to be the case, also, with an insect known as the myg, in Norway, and called a gnat in England, which resemble much the mosquito. The sensibility of different persons to the attacks of this insect vary much with the individual, yet the fact of gradual immunity seems to be well established. Old residents suffer less than strangers. A curious periodicity in the symptoms which attend the sting is noticed, and the symptoms themselves carefully described. There is a small pimple-like mark, which itches intensely and is very sensitive to heat, and painful sensations, although dulled to the ordinary sensations of touch. These symptoms disappear in a few hours, but reappear again in about twenty-four hours, the recurrence and disappearance being repeated four or five times. Mr. Williams suggests an investigation to determine the cause of this sting, whether toxic or due to a microbe.

Photography in Colors is a problem which has commanded much research since the invention of the art, but with varying success. Since 1860 several processes have been announced, the success of which have been vouched for by competent authorities, but as yet none of them have become so prominent as to make colored photographs common property. In the year just mentioned, E. Becquerel prepared daguerreotype plates by coating them with subchloride of silver, which yielded good colored impressions. Poiteven modified the method by substituting paper for the silver plate used by Becquerel. Unfortunately, in spite of the investigations of Becquerel, Poiteven, Zenker, and many others, no means of fixing these images has been discovered. While they will persist indefinitely in the dark,

exposure to the light, by its continued action on the silver salt, utterly destroys it.

In 1869, Ch. Cros and Ducos du Huron, independently, in France, and Baron Bonstettin in Germany, devised a process which may be briefly described thus: Three separate colorless negatives of the object are prepared in the usual way, but letting the light come through colored screens. From these negatives three positives are prepared which are colored with appropriate dyes, and then by superposition give the desired colored image. Professor Joly has improved the method so as to obtain all three of the images on the same plate. These colors are not, however, truly photographed, and a large degree of arbitrariness enters into the selection of the dyes.

Professor G. Lippmann, in recent numbers of the *Chemical News*, has been describing the method devised by himself and first announced in 1891. It is based upon the well-known phenomena of the interference of waves of light meeting in opposite phases, the results of which are well illustrated in the colored images on soap-bubbles, Newton's rings, etc. A transparent film of any kind made from chloride, bromide, or iodide of silver, contained in a substratum of albumen, collodion, or gelatine, is placed in the camera slide, and a mirror is formed behind it and in contact with the film by allowing mercury to run in from a small reservoir connected with the slide by a rubber tube. After the exposure the mercury is withdrawn by lowering the reservoir, the plate removed and developed and fixed with cyanide or bromide of potassium. Nothing of the usual technique of photography is changed excepting the introduction of the mirror, which reflecting back the light forming through the film, produces interference, and the elimination of certain wave lengths, resulting in the deposition of the silver in a stratified form. The appearance of color is due to this definite stratification, but a detailed technical explanation cannot appropriately be undertaken here.

Within the last few weeks have been announced two more methods. M. Villandieu-Chassagne is the inventor of a process which bears some resemblance to that of Cros, du Huron, and Bonstettin as modified by Joly. Therefore, our caption may be misleading in this sense, that the colors can not be

said to be photographed themselves, at least directly, for they are obtained by treating a properly prepared plate with certain solutions of a secret composition, when the colors are brought out.

A negative is produced in the usual manner upon a plate specially prepared by M. Chassagne. A print is then obtained, either on glass or on paper prepared in the same way. This print, which so far exhibits no trace of color, is then treated successively in baths of blue, green, and red solutions, when the various gradations of color and hue are imparted to the print, by what is described as elective absorption. The composition of the four solutions, wherein the success of the process lies, is still withheld by the inventor. Sir H. Trueman Wood, of King's College, England, in the laboratory of that institution, not only witnessed several trials of the method by M. Chassagne, but actually carried out the entire operation himself, excepting the preparation of the solutions, and vouches for its success and reliability, as have other witnesses. It is to be hoped that the process may be speedily patented and the details given to the scientific world.

But even more wonderful, if the accounts are to be credited, is the work of Mr. Bennetto in England. His method is also, as yet, a secret. It is claimed for it that photographs can be taken, with an exposure of sixteen seconds, of any or all combinations of colors, and printed directly upon paper or plate without washing with colored solutions or the use of any auxiliary apparatus. As an illustration of the possibilities of the method, we quote from a notice in a recent issue of *Nature*: "Perhaps the picture which best illustrated the capabilities of the process was one of a champagne bottle standing on a white table cloth, and surrounded with various fruits. Here there were three or four whites, which were all distinguishable, but which it would have taxed the powers of any artist to represent by painting. The gold foil on the bottle was exactly rendered, and it was possible to tell that it was full by the gleam of the liquid."

Here again it is to be regretted that from the apparent necessity for secrecy, to procure patent rights to the discoverer, the world cannot be put in possession of the details by which

these wonderful results are produced, details which, in themselves, must rival in interest the effects through them obtained.

Earliest Record of Arctic Plants.—The only original contribution to the history of botanical research which, during the last year, having been published in an American journal, was at once reprinted in Europe, was Mr. Theodore Holm's "Earliest Record of Arctic Plants." Mr. Holm introduces his paper by the following graceful tribute to the Department of Botany of the Catholic University, showing that it was here that he was put in possession of the facts so long unknown, and enabled to complete so valuable a contribution :

"Through the courtesy of Dr. Edward L. Greene, my attention has been called to the fact that our earliest knowledge of the arctic flora is not of recent date. The invaluable botanical library which Dr. Greene has accumulated, and which is now located in the Catholic University at Washington, D. C., contains a vast number of rare sixteenth and seventeenth century books, which are truly a great boon to the working botanist. It was in this library that Dr. Greene showed me a short chapter in Ray's *Historia Plantarum Generalis*, wherein are enumerated and described some plants collected in Spitzbergen more than two hundred years ago."

Mr. Holm, one of the botanists of the Department of Agriculture, is a specialist in Arctic European botany, and a frequent student-visitor at the University. His new-old first chapter in the history of Arctic botany appears to have come as a surprise to specialists in that line abroad. The paper was issued in the first place by the Biological Society of Washington, in June last, but was at once copied, with a most complimentary editorial preface, in the *London Journal of Botany*.

A library which furnishes material for such contributions to knowledge is, in itself, doing university work of the first order.

